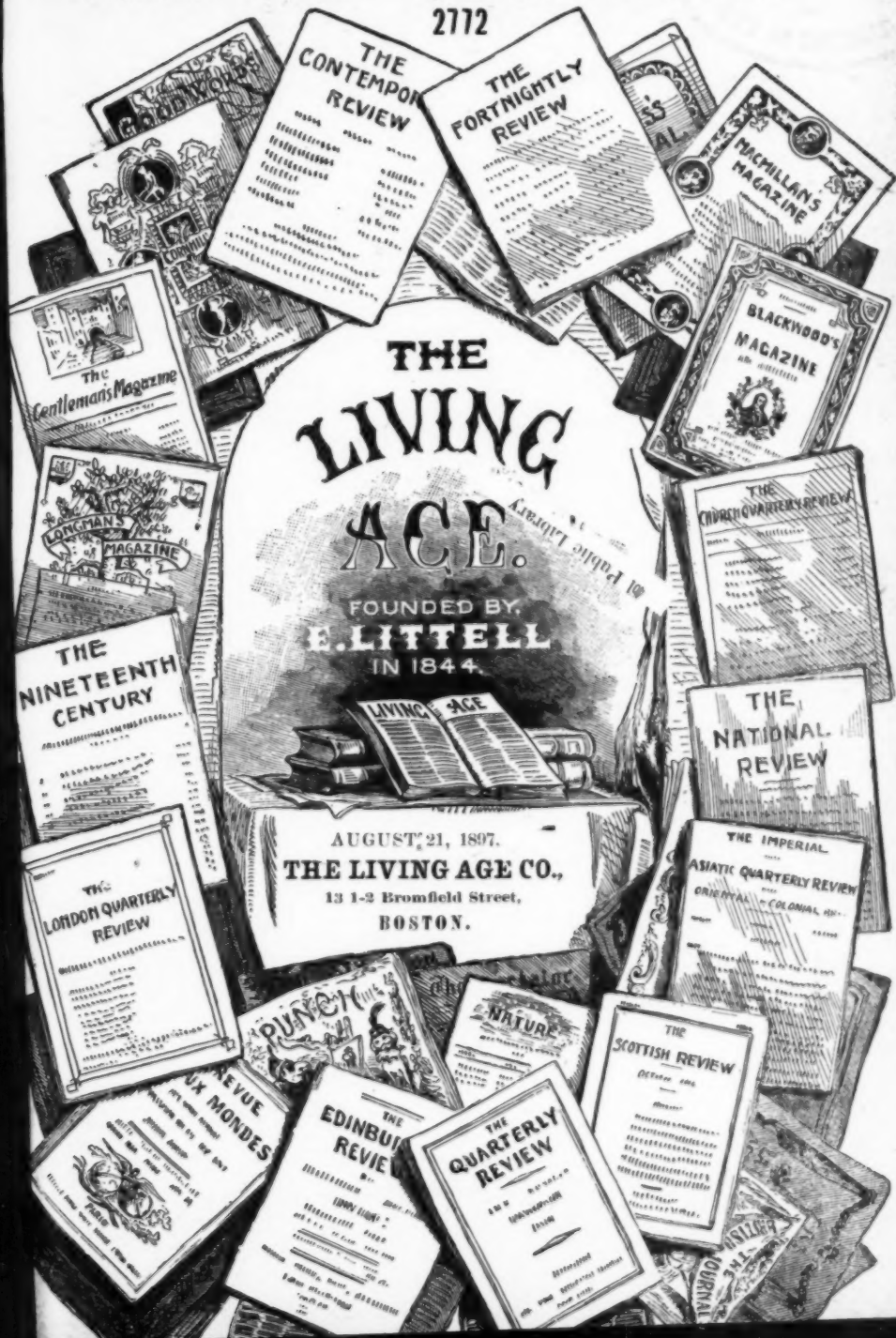


RECENT SCIENCE—By PRINCE KROPOTKIN.

2772



ANNUAL SUBSCRIPTION REDUCED TO \$2.50

A MONTHLY MAGAZINE

Subscription \$2.50 a Year

25 Cents a Copy

The ARENA

EDITED BY
JOHN CLARK RIDPATH, LL.D.

IF YOU CARE TO KNOW
WHAT THE FOREMOST
THINKERS AND REFORM-
ERS OF THE PRESENT
TIME ARE SAYING AND
DOING, READ THE ARENA

Its articles deal with ques-
tions of vital interest to
every thoughtful person

THE ARENA CO., COPLEY SQ., BOSTON

FOR SALE BY ALL BOOKSELLERS
SENT POSTPAID ON RECEIPT OF PRICE

.
y
-
-
D
A
.
ON

THE LIVING AGE.

Sixth Series,
Volume XV.

No. 2772—August 21, 1897.

{ From Beginning,
Vol. CCXIV.

CONTENTS.

I. RECENT SCIENCE. By Prince Kropotkin,	<i>Nineteenth Century</i> ,	499
II. THE AMULET. From the Italian of Neera. Translated for The Living Age by Mrs. Maurice Perkins. Part V. (Conclusion.)		512
III. PASCAL. By Leslie Stephen,	<i>Fortnightly Review</i> ,	517
IV. THAKUR PERTAB SINGH: A TALE OF AN INDIAN FAMINE. Part II. By Sir. C. H. T. Crosthwaite,	<i>Blackwood's Magazine</i> ,	529
V. THE SPHINX OF MODERN LONDON. By F. W. Newland,	<i>Leisure Hour</i> ,	539
VI. THE LESSER ELIZABETHAN LYRISTS. By Stephen Gwydd,	<i>Macmillan's Magazine</i> ,	544
VII. LEGAL PROCEEDINGS AGAINST ANIMALS. By E. T. Withington,	<i>Cornhill Magazine</i> ,	552
VIII. JEAN INGELOW,	<i>Academy</i> ,	556
IX. THE SWIFT'S NIGHT-FLIGHT. By Charles A. Witchell,	<i>Knowledge</i> ,	558

POETRY.

THE KINGFISHER,	498	THE SAILOR'S BRIDE,	498
-------------------------	-----	-----------------------------	-----

PUBLISHED EVERY SATURDAY BY
THE LIVING AGE COMPANY, BOSTON.

TERMS OF SUBSCRIPTION.

FOR SIX DOLLARS remitted directly to the Publishers, THE LIVING AGE will be punctually forwarded for a year, free of postage.

Remittances should be made by bank draft or check, or by post-office money order, if possible. If neither of these can be procured, the money should be sent in a registered letter. All postmasters are obliged to register letters when requested to do so. Drafts, checks, and money-orders should be made payable to the order of THE LIVING AGE Co.

Single copies of THE LIVING AGE. 15 cents.

THE KINGFISHER.

Of all the little hearts in feather,
Of all the little wights in fur,
Give me the Kingfisher.

My soul and it, methinks, take life to-
gether!

Not where the shining spaces of the mere
Lie blue and clear,
But where the brook's small waters run
Reflecting emerald leaves and chinks of
sun,

On a dead branch, in solitude
It watches for its fleeting food.
So, poised on dead and dying things,
Not in the glare of being, but the sough-
Dim, tranquil umbrage of sequester'd
thought,

The soul keeps vigil o'er the living springs

Bright bird, thine azure wings, thy ruddy
breast—

The colors of the furrow and the sky—
Remind me that at worst and best
Akin to earth and aimed for heaven
am I.

Leaf-cloistered in a solitary reach,
Thou keepest watch without a mate,
Without a song;

Even so the soul that would await
Life by the living springs must linger
long,

Withdrawn from human fellowship and
speech.

Hark! dry wood snaps. Who dares in-
trude

Upon thy sea-green solitude?
(Hush! hush!) No human will shall do
Thy spirit wrong: thou shalt be let
alone.

Alas, one flash of blue—
Heaven's color—tells that thou art
flown.

Good Words.

VIDA BRISS.

THE SAILOR'S BRIDE.

When first I told my granny old
That I'd be Donal's bride,
She took my face between her hands,
Then turned away and sighed.

"My father led a sailor's life,
He was your joy," I cried;
"My mother was a sailor's wife;"
Yet still she only sighed.

My wedding clothes with her I chose,
We fitted them with pride;
With heart's content to church I went,
I left it Donal's bride.
No bluer, truer eyes than his,
No breast of braver brown,
No stouter arm, no fonder kiss,
Search Derry up and down.

Yet we were wed but three months' time,
But three months and a day,
When Donal to a foreign clime
Should voyage far away.
Ah, then too well I learned to tell
Why first my granny sighed—
For four long years of aching fears
An absent sailor's bride.

Our boy's first cry, and he not by
My pride and joy to share—
Our boy's first walk and pretty talk,
And still no father there.
And letters long and letters short
From half the world around,
Grown leaf by leaf a blistered sheaf
In bridal ribbons bound.

And is he coming home again
Who all these years has ranged?
And will he be the same to me
Although I so have changed—
The same again, the same as when
Of old he courting came
And looked me through with eyes so blue—
Oh, will he be the same?

I would have drest in all my best;
He'd have me wear my worst,
The faded gown of homespun brown
In which he saw me first.
My woman's heart would have me smart,
I'm but a woman still;
But bide, gay gown; come, old one, down;
Let Donal have his will.

The Southern Star has fetched the bar,
She's signalled from the land.
Quick, little Donal, to my arms!
Now on my shoulder stand.
See, there she sails, he's at the rails
He's waving to the shore!
Wave back, my lad, to your own dad
Ay, 'tis himself once more!

ALFRED PERCEVAL GRAVES.

Athenæum.

From The Nineteenth Century.

RECENT SCIENCE.

BRAIN STRUCTURE—THE APPROACH OF THE
"BLACK DEATH"—SNAKE-BITE.

I.

Not further than thirty or forty years ago it was very generally maintained and taught that the psychical activity of mind on the one side, and the chemical or physical changes which take place in the brain and the nerves on the other side, belong to two quite distinct domains, separated by a wide gap which can by no means be bridged over. Our sensations, our emotions, our thoughts, it was said, and the material changes which may go on in the nervous system, are not only two distinct sets of facts—they are two quite separate worlds, "separate in existence." Consequently, if physiologists should ever succeed in tracing each electrical current and each chemical change produced in the brain and the nerves whilst a sensation is awakened and thoughts besiege our mind, they nevertheless would add absolutely nothing to our knowledge of sensations and thoughts; still less to their interpretation. Facts of psychology can *not* be explained by facts of physics or chemistry.

Current ideas, however, are rapidly changing upon this point. It lies beyond contest that from a mass of psycho-physiological investigations which have been made within the last thirty years, something new has continually been learned about man's psychical life—something that could not be learned from mere psychological self-observation. And gradually, even the strictest psychologists have grown accustomed to the idea that in the researches of physiologists they will find, to say the least, a most precious aid for their own investigations. One group of such researches—into the gradual evolution of senses in the animal world—was analyzed last year in this Review; and the new light that was thrown by these researches upon the complicated nature of our own sensations, as well as upon the evolution of what we de-

scribe as the conscious state of mind, was indicated. Now we have to analyze another group of epoch-making discoveries relative to the finer structure of the nerve-system, and to see what may be learned from them about a still higher sphere of mental activity, namely, the associations of ideas and mechanism of thought.

The ambition of modern physiologists will be best understood from some such illustration as the following. Suppose a flash of lightning strikes our eyes, and we see a thunderbolt striking a tree in our neighborhood. Immediately, and quite unconsciously, we may stop in our walk, turn pale, or lift our hand as if to protect our eyes. Next we may make some quite conscious movement—run, let us say, towards the tree to ascertain whether a child which we saw a moment before in that direction has not been struck by the thunderbolt. Or the reminiscence of a friend who has had a narrow escape in a similar circumstance may be awakened all of a sudden. Or we may set thinking about the rain which is coming, and is much wanted for the crops, or about electricity and the cause of lightning, or about the beauty of the suddenly illuminated landscape, and so on. Now, our sensations in this case, and our subsequent emotions, conscious actions, and thoughts may, of course, be described and studied by the psychologist; in fact nearly all the domain of psychology can be strolled over in this simple case. But then the physiologist steps in. He wants to know, in his turn, what changes, chemical or physical, took place in the retina of our eye as it was struck by light; what nerves were irritated next, and to what parts of the brain and the spinal cord the nerve-current was transmitted; in which way these or those muscles of the arm, or such blood-vessels of the face, were contracted; what took place in the cells of the brain, and in which way the conscious run towards the tree was originated; by what mechanism the old, dormant reminiscences of a friend, or the familiar associations of lightning with rain, with electricity, or

with the beauty of a landscape, were awakened; in which spots of the brain were these associations stored, and how was it that once more they came to consciousness?

The problem is immense, and is imbued with the deepest interest. It matters little what are one's particular views upon "matter" and "mind." Once it is admitted that for each sensation, emotion, or thought there is an equivalent process which goes on in the brain and the nerves—and that much is now admitted on all sides—both processes must be known in full. They may be described as simply "parallel," but "separate in existence," and not in the least independent—that would be the dualist's view; or they may be considered, by the monist, as the two aspects, inner and outer, of the very same process; or the psychological process may be considered as a result of what took place in the brain and the nerves—such would be the materialist's view; but all three—the dualist, the monist, and the materialist—are equally interested in knowing both processes in all their details. This is, in fact, what science aims at at the present time.

The task is, however, beset with almost incredible difficulties, and one of the chief among them was for a very long time the impossibility of making out the finer structure of nerve-tissues. In all sciences dealing with life it has been lately found out that a *grosso modo* study of the organs is utterly insufficient; that in order to understand nutrition and growth, reproduction and heredity—life in a word—attention must be turned to the wonderful phenomena which go on in the tiny microscopical cells. The same became necessary in psycho-physiology: the tiny nerve-cells, each of which leads its own life, while all are thoroughly connected together, had to be studied. Not further back than ten years ago that study met with almost insuperable obstacles. The nerve-cells were found to be surrounded with such an inextricable tissue of finest nerve-fibres that it seemed almost hopeless to disentangle the tissue. Imagine a thick felt, which is

composed not of thick hair, but of millions of finest microscopical fibres ramifying in all directions, and try to follow in it each separate fibre! Various roundabout methods were tried, and the most astounding was that certain anatomists (especially His) succeeded to some extent in disentangling that network, at least for the white bundle of nerves. But the grey substance of the brain and the spinal cord defied all their efforts.

Then came, in 1885, the welcome news that the Italian professor, Golgi, had discovered a new method of staining microscopical preparations, which enabled him to trace separate nerve-fibres in the grey tissue as well. The method soon was tested, slightly improved upon, and in the hands of such anatomists as His, Lenhossék, van Gehuchten, Retzius, Sala, and especially the Spanish anatomist, S. Ramón y Cajal, and the veteran histologist Kölliker, it soon yielded quite unexpected results. In less than ten years the felt was disentangled; and the intimate structure of the brain and the spinal cord—their grey and white substances alike—the nerve-ganglia, and the nerve-system altogether, appeared under a quite new aspect.

It is firmly established now that the different parts of the nerve-system consist of millions of microscopical nerve-units, which are all built upon the same fundamental plan. The name of *neurons* has been proposed for these units, and is now pretty generally accepted. Like all other cells, the nerve-cells consist of protoplasm, and have a nucleus and a still smaller nucleolus; while they vary, of course, very much in size, and their shape may be round or stellar, or roughly triangular. A typical nerve-cell differs, however, from all other cells in that it has, as a rule, two sorts of outgrowths. On the one side it gives origin to short ramifications of naked grey protoplasm, which may be covered with protoplasm granules or send out short side branches, so that they resemble a microscopic moss; these ramifications have received the name of *dendrons*. From the other side

of the cell issues a nerve-fibre—one or more. As a rule the fibre is longer than the dendrons: it may attain any length, from a mere fraction of one-tenth of an inch to two or three feet. Its ramifications are also much longer, and it essentially differs from the dendrons in being smooth and consisting, as a rule, of a thin thread of grey nerve-matter enclosed in a thin sheath of yellow, greasy, protective matter. The fibres end in a great number of thin tree-like, unsheathed ramifications. It has been remarked, moreover, that wherever the functions of the nerve-cells are well determined, the naked moss-like dendrons convey outside irritations *towards* the cell; while the sheathed nerve-fibres convey the nerve-current *from* the cell—to the muscles, to the tissues, or to other nerve-cells.

A nerve-cell, with moss-like ramifications of naked protoplasm (dendrons) on the one side, and with one or more sheathed nerve-fibres issuing from it on the other side—such is, then, the typical *neuron*. This is the fundamental unit out of which the nerve-system is built up. In a frog it will have but few and short ramifications on both sides; but in a lizard, in a rat, and the more so in man, the number of ramifications will be very great. Again, in the embryo of a mammalian the embryonal nerve-cell (*neuroblast*) will be simply an oval sac provided with but one thread-like appendage; but as the animal grows, two sorts of appendages appear, and they ramify more and more, in proportion as full mental development is attained. And, what is still more striking, whether we take those big cells in the grey cortex of the brain which are the organs of the highest psychical faculties (the so-called "psychical cells"), or any other nerve-cells, they maintain the same essential features. The differences are in the number of their ramifications, and in their connections with other neurons. The infinite variety of man's psychical life, his sensations, his emotions, his conscious and unconscious movements, and his thoughts have thus no other arena for their development but these nerve-cells, with

their protoplasmic outgrowths, and their nerve-fibres. An inexhaustible variety of psychical acts is achieved, not through a corresponding variety of elements, but through the countless multitude of *connections* which can be established between these millions of cells. When the flash of lightning makes us move our hand or run, laugh, or cry, and think of this or that subject, these manifold results are obtained in accordance with the various connections that are established between the ramifications of thousands of cells. Neurons of the brain and the spinal cord transmit nerve-impulses to each other, and nerve-currents are sent through other neurons to the arms and legs, to different muscles of the face, to the heart, to the blood-vessels, and to different other cells of the brain itself. And out of this multitude of connections a very small part only will reach our consciousness—what we call our "I"—while the immense number will be simply automatic and lie beyond any control.

The linkage of the neurons deserves special attention. In the simplest case a neuron may receive irritations through its dendrons, and transmit them through its nerve-fibre to a muscle, which consequently contracts. More often, however, the ramified ends of the nerve-fibre do not yet reach a muscle; they spread amidst and around the dendrons of another neuron, and the nerve-current has to pass through a second neuron before it reaches the muscle. Again, the nerve-fibre of the second neuron often divides into two branches which run in opposite directions: one of them goes, for instance, up the spinal cord, reaches the brain, and there envelops with its twigs the dendrons of a psychical cell; while the other branch goes down the spinal cord and reaches another neuron, out of which a fibre runs towards a muscle or to some other neuron connected with some other part of the body.

The countless combinations which may arise in this way and the complexity of results can easily be imagined. The three chief parts of the central

nerve-system of man—the brain, the spinal cord, and the nerve-ganglia—are thus closely connected together. Nay, within the brain itself countless fibres connect its different parts and regions; while thousands of nerves connect the organs of senses, as well as all muscles and all the inner organs, and even each hair of the skin, with some part of the central system. Surely it is by no means an easy task to find out the paths of the nerve-currents within that amazingly complicated network. But they have been followed, and are now known to a great extent.

An illustration will perhaps better represent the complexity of these connections, and show their characters. Suppose the skin of the right hand is irritated by, let us say, a burn. The end-ramifications of some nerve-fibre, which exist in every portion of the skin, at once transmit the irritation inwards, to a ganglion cell, located near the spinal cord. From it a nerve-impulse is sent along another nerve-fibre, which enters, let us say, the spinal cord, and there envelops with its end-branches the dendrons of some neuron. The central nerve-system has thus been rendered aware of the irritation of the skin, and in some way or another it will respond to it. The nerve-current, after having reached the cell of that spinal cord neuron, immediately issues from it along a nerve-fibre; and if that fibre runs towards a striated muscle of, let us say, the other hand, our left hand may touch or scratch the burned spot without our "I" being aware of that action; it is a simple reflex action. But the nerve-fibre of that same cell may divide into two main branches, and while one of them runs to the muscle of the left hand the other branch runs up the spinal cord and reaches (either directly or through an intermediate neuron) one of the big pyramidal cells of the grey cortex of the brain. The ramifications of this branch envelop the dendrons of the brain cell and transmit the impulse to it. Then our "I" becomes conscious of the sensation in the right hand, and we may—quite consciously this time—ex-

amine the burn. However, the pyramidal cell in the grey cortex is connected, through its dendrons and fibres, with many other cells of the brain, and all these cells are also started into activity. But the big pyramidal cells, in some way unknown, are the recipients and keepers of formerly received impressions; and as they are stimulated, associations of previously impressed images—that is, thoughts—are generated. A familiar association between a burn and oil may thus be awakened, and we put some oil on the burn. At the same time the nerve-impulse was also transmitted to that row of ganglia (the so-called vaso-motor system) which is connected with the heart, the intestines, and all other inner organs, as also with the blood-vessels, the glands, and the roots of the hair. And if the burn was severe, and very painful, the activity of the heart may resent it, as also the blood-vessels: we may turn pale, shed tears, and so on.

Now, if we analyze this illustration (which only represents one out of scores of possible results of an outward irritation), we see that various hypotheses may be made for explaining how an undoubtedly physical nerve-impulse (the burn) could be transformed into complicated psychical processes, each of which also ended in physical facts (contraction of muscles, tears, and so on). The dualist, the monist, and the materialist will each defend his own hypothesis. But the paths which the nerve-impulse follows, and the activity which it starts in a number of cells of the brain, the spinal cord and the ganglia are hypotheses no more. They are facts which have been ascertained by scores of direct observations. The electrical effects of the nerve-impulse, as it is transmitted along such and such nerves, have been measured; its transmission from this or that cell of the cord to these or those cells of the brain has been tracked step by step; nay, as will presently be mentioned, the activity of the stimulated nerve-cells in the brain and elsewhere has actually been observed, and the effects of fatigue in nerve-cells have been studied

in detail. And when the anatomist maintains that an irritation of the skin will be transmitted in this way, and not in another, to such cells in such cases, and start into activity such cells of the brain, this is speculation no longer. It is a fact of natural science, firmly established, and verified in different ways by a mass of mutually controlled observations.

II.

The consequences of these remarkable researches and discoveries are evidently numerous and important.

Each neuron is, then, a separate unit, and can be compared to an amœba-like organism, possessed of its own life, its own irritability, and its own capacity to receive irritations from without and to answer them. And, starting with loose aggregations of nerve-units of the simplest type—such as are found in both the lowest animals and the embryos of the highest ones—it became possible to trace step by step the evolution of the nerve-system in the animal series, and the parallel evolution of psychical faculties—not yet in all details, but in all its essential features.

At a very low grade, in very low animals, the neurons are already found grouped into nerve-ganglia, and there they already become connected together and associated. Consequently, a very vague sort of consciousness, derived from irritations transmitted to a group of associated nerve-cells, already makes its appearance. Then, going a step further, to the lower articulate animals, such as worms, which consist of separate segments, a succession of nerve-ganglia is found—one pair in each segment; and as that series of articulates is ascended higher and higher, nerve-fibres are discovered, which issue from separate ganglia, and run lengthways, connecting them together. Accordingly, a sort of common consciousness of the whole being, of the whole chain of segments, is evolved, and every one can easily ascertain it himself by observing the behavior of these animals.

At the same time, in the front segment of the animal—its head—the vision and the smell organs are specified more or less; nerve-matter grows round the inner ends of the nerves of these sense organs, and a sort of brain is developed; while in the high articulates (bees, wasps, ants) there is already a real brain, connected by nerve-fibres with all other parts of the body. And yet each of the segments of the body being possessed of its own ganglia, maintains its own consciousness. The body of a beheaded grasshopper continues for a short time to lay eggs, and the head of an ant, separated from the trunk during one of their battles, remains, as the great explorer of ants, Professor Forel, remarks, for a few seconds "capable of distinguishing between an inhabitant of its own nest and a stranger, and behaves accordingly"—that is, tries to fight the latter.

It is only in vertebrates that the brain gradually attains a prevailing influence over the entire nerve-system, and that such anatomical features are discovered in it as correspond to a higher psychical activity. Only in birds and mammals, but not yet in fishes and reptiles, the inner ends of the nerves of vision become connected with the grey cortex of the brain by a great number of nerve-fibres; and consequently the bird, and still more the mammal, not only sees, but understands what it sees, and interprets it in connection with previously accumulated experience. Compare in fact the sparrow, which at once notices that the small scraps of paper which you throw him, instead of grain, are no food, with the hungry snake, which stops in the midst of its pursuit of a mouse or a frog, and even glides over the latter, simply because the one and the other have stopped running or jumping. The bird knows what it sees, and associates it with what it has seen before, while the snake is nearly devoid of that power. It is known, moreover, that in the human infant the anatomical connection between the nerves of vision and the grey cortex is established dur-

ing the second month of life, and that that moment marks the opening of a quite new departure in psychical life; while, on the other hand, even a full-grown man loses his capacity of spelling and reading if those nerve-flores are destroyed by any cause.

Altogether, it is only in mammals, and especially in man, that the grey cortex of the brain attains a considerable development, and that thousands of fibres which do not exist in lower mammals connect together the different parts of the cortex itself—and no one doubts the superiority of human intelligence. Nay, in the highly developed human individuals, these connections or association channels attain their highest development, and it is not unreasonable to presume that the development of such association pathways, as well as a formidable development of the protoplasmic and nerve-fibre ramifications of the cerebral neurons, are of a greater importance for the development of a higher intelligence than the size or even the weight of the brain. However, even in man, what we describe as our consciousness is the resultant of a very great number of nerve-impulses spreading in a mass of neurons—the greatest portion of these impulses never reaching our consciousness. All psychical facts which we know from self-observation are thus syntheses, but extremely incomplete and often deceptive syntheses, concerning the real sequence of processes which are going on in our brain.

Thousands of nerve-impulses or nerve-waves (*neurocyms*) flow continually through the fibres and cells of our neurons. True that the nature of these nerve-currents is still unknown; but it is certain that the electrical charge of a nerve-cell varies while it is at work, and that chemical changes take place in the protoplasm of the cell. The admirable observations of Professor Hodge in America, continued and extended by Dr. Mann in this country, show, indeed, that a nerve-cell, after it has been at work for some time, whether in brain work or in stimulating a muscle for muscular work, is

deeply affected. The nucleus shrinks together, large vacuoles appear in its protoplasm; and some time of rest—chiefly sleep—is absolutely necessary, in order that the cell may return to its previous state. If this condition is not fulfilled, an overworked nerve-cell or a group of such cells will never recuperate; overwork without proper rest will make them lost forever, while other neurons close by, which were not overworked, will remain unaffected.

The relative independence of the neurons undoubtedly throws some new light upon the processes of thought. Our intellectual activity consists, as we all know, of ever-changing combinations of representations or images which in some way unknown have been stored in our memory. When we think, we always draw upon that stock. But so many impressions and images have been impressed upon the memory in one's lifetime that, if all these impressions and images were awakened each time that we set thinking, we would be overpowered by their mass; our thoughts would become a hopeless confusion. In fact every one knows, more or less, from his own experience, such a state of mind when we are unable to think, on account of the too great multitude of associations that are awakened at the same time. Happily enough, the immense number of images stored in our memory remains dormant; and when we begin to think about some subject, those facts and images only which we have been recently accustomed to associate with the present subject of our thoughts are awakened; and it takes some time before other less familiar associations and secondary connected facts, which we once knew but had practically "forgotten," are recalled to life and join the main current of thought.

Now, it is generally admitted that the big pyramidal cells of the brain cortex are the actual seat of memory, each of these cells retaining (in some way unknown) some trace of a given representation or of a group of images. It is well known, indeed, that the destruction, degeneration, or paralysis of sep-

arate pyramidal cells results in the loss of memory of a given group of facts, or even of given words, not of all memory. But as these and similar cells are embedded in an inextricable tangle-work of nerve-fibres, which were formerly supposed to be permanently connected with each other, it was always a stumbling-block for the physiologist when he tried to explain why the irritation or the activity of one of these cells does not spread to *all* cells at once, in which case the above-mentioned confusion would have been unavoidable.

The recent discoveries put an end to that difficulty. S. Ramón y Cajal has proved, and his conclusions are now confirmed by a mass of researches, that, though the ramifications of two neighbor neurons lie in a very close contiguity to each other, there is no permanent contact between them. The gap is, perhaps, of one ten-thousandth part of an inch, but there is a gap; and unless a temporary contact be established the nerve-current cannot pass from one neuron to the other. Such temporary contacts undoubtedly are continually established and broken again, and the question is in what way, and owing to what cause? But the question itself has arisen so recently that here we must enter on the domain of hypotheses. The physiologist knows the dead neuron, and sees that there is no contact between its ramifications and those of the next neuron; but how can he observe a nerve-cell in the brain while it is in full activity? And yet, notwithstanding, something is already known about this delicate subject, and more will surely be known soon.

The Italian anatomist, Tanzi, established that in the ordinary state of things the ramifications of two neighbor neurons do not touch each other; but he also discovered that when a nerve-current flows along a nerve-fibre it elongates it, and thus the working fibre can touch the next neuron. On the other side, Widersheim has studied *living* neurons in the brain of a little crustacean (*Leptodora hyalina*) which has so transparent a body and

skin that the cells of its brain can be observed while they are in full activity. It appeared that they are endowed with a wonderful mobility. Like the little amœbas, they change their forms, protrude ramifications and draw them in, exactly as the amœba draws in and protrudes its pseudopodia. And the proof that the little brain was working in its own crustacean way, whilst Widersheim observed it, was that its cells exhibited the same symptoms of fatigue which Dr. Hodge discovered in the nerve-cells of higher animals; their contents became troubled, and the same vacuoles appeared in their protoplasm. Only the movements of the brain-cells of the little creature were very much slower than they ought to be in the neurons of higher animals.

Striking as these facts are, they do not yet seem sufficient to explain how the temporary contacts are established, and there are several hypotheses in the field. Rückert and Lépine prefer the purely mechanical explanation. The nerve-current, they say, itself draws the nerve-fibre which it passes through, and the contacts are established in this way. Another great authority, Mathias Duval, who has brilliantly worked out the consequences of the temporary contacts between neurons, is inclined to believe that the activity of a nerve-fibre results in the secretion of some chemical substances which may attract the protoplasmic ramifications of the next neuron; but the hypothesis is contested by no less an authority than Kölliker. And finally, S. Ramón y Cajal resorts to a third hypothesis. The nerve-cells, he remarks, are embedded amidst a mass of small, star-shaped cells, provided with long, feathery ramifications (the *neuroglia* cells). Formerly the neuroglia cells were supposed to supply nutritive elements to the nerve-cells, but now that they are better known this opinion has to be abandoned, and the Spanish histologist attributes to them a much higher function: he considers them as isolators of the nerve-currents. When the brain is at rest, the neuroglia cells

have their thin feathery branches widely spread, and thus prevent the fine ramifications of two neighbor neurons from touching one another. Nerve-currents cannot pass from one neuron to the next. But when, under the influence of some impulses, either dependent or independent upon will, some neuroglia cells are contracted, their feathery fibres are drawn in, and in consequence of mere inter-cerebral pressure the end fibres of one neuron touch the dendrons of the next neuron, and the nerve-current is transmitted. Our voluntary and our involuntary movements, the associations of ideas, the aberrant ideas which sometimes cross the brain, and the words which escape involuntarily would be due, under this hypothesis, to the contractions of neuroglia cells. The obsession of some reminiscences which we cannot get rid of would result from a tetanous contraction of some neuroglia cells. The temporary exaltation of thought at certain moments, and the difficulty of expression at other moments, could be easily explained under the same hypothesis; while the idea of the identity of one impression with a previous impression might be due to the fact that the two have contracted the same or similarly situated neuroglia cells. Ideas of analogy, of difference, and so on, could be explained in the same way, while various mental diseases would be the result of the paralysis of certain neuroglia cells.

These are, of course, hypotheses only. A quite new chapter of the physiology of the brain having been opened, some provisional hypotheses were necessary—be it only for the further guidance of explorers; but there has been no time yet to thoroughly test them by experiment. It may well be that the neuroglia cells really have the functions attributed to them by the great Spanish histologist; or it may appear that the connections between neurons are broken and re-established in some simpler, more mechanical way. In one thing, however, all authorities agree: the connections between the neurons are not permanent. They are broken

while we are asleep; accidental connections only being established during sleep—therefore the incoherence of dreams. When we wake up, it takes some time, or it requires a stronger irritation of the senses from without—stronger sounds, more light, or a stronger shock—before the connection between the neurons of the brain and those of the spinal cord is re-established. When we set thinking, a number of neurons in the brain-cortex are started into activity; the temperature of the brain (as proved by Mosso) slightly increases, as also its volume; and associations of ideas are awakened, in proportion as fresh contacts are established between the already active neurons and new ones, which receive nerve impulses from the former. Coffee and tea, which are known to stimulate the amoeboid movements of protoplasm, therefore aid in establishing such new connections and stimulate thought. While, on the other side, a strong irritation of the peripheral nerves—a sharp sound, or a sudden flash of bright light, or a strong pain in the skin—paralyzes the thin ramifications of many neurons, and their connections are broken. Nay, hypnotical sleep, as well as various forms of local paralysis and hysteria, become easy to explain, once it is proved that contacts between neurons can be established, or broken, by outward and inward stimuli.

Twenty years ago, a great anatomist (Hyrtyl), writing upon the structure and the functions of the brain, could but quote the words of a seventeenth-century writer: *obscura textura, obscuriores morbi, functiones obscurissimæ*. Now, the first and the most important step has been made. The pathways of the nerve impulses have been traced, the despairingly complicated network is disentangled. And, at the same time, a quite new insight into the mechanism of mental activity has been won—so promising that there is no exaggeration in saying that we stand on the threshold of quite new conceptions of the physiological aspects of psychical life.

III.

The plague is at the doors of Europe. Not some sort of plague, but the same terrible "black death" which ravaged Constantinople in Justinian's time, destroyed one fourth part of the population of Europe in the Middle Ages, and paid terrible visits to different parts of Europe in the seventeenth and eighteenth centuries. After it had left Egypt in 1844, it was believed to be extinguished; but it continued to breed in various inner parts of Asia, and in 1894, coming from the Chinese province of Yunnan, it invaded Canton, taking sixty thousand victims in a few weeks. Thence it spread to Hong Kong, reached next year the island of Hainan and Macao, invaded Formosa in 1896, and in the autumn of the same year appeared at Bombay. In the big city of India it found all necessary conditions for breeding, unchecked, for several months in succession: famine, overcrowding, and the absence of all preventive measures; and from Bombay it was carried, by rail and road, to different parts of India. So far as official information goes, the city of Poona and the districts of Surat, Kolaba, Thana, Karach, and Hyderabad are already infected—which means that, travelling north-west along the seacoast, the terrible enemy has reached the frontier of Baluchistan. Now it is daily expected in Afghanistan, whence it is sure to invade Turkestan, Persia, and Asia Minor. The Russian Plague Committee already report one case of bubonic plague, at Tavrız—that is, near the frontier of Caucasus; and, as things stand now, even if Russia mobilized her whole army and kept a hedge of bayonets along her Asiatic frontier, the hedge would not be thick enough to prevent the invasion of plague in Europe. Unless some microbe wages war on the pest microbe and stops its advance, eastern Europe must be invaded by the pest once more, and it hardly need be said that invasion by land is infinitely more dangerous than invasion by sea.

Happily enough, the plague is no

longer the mysterious, revengeful being which it used to be for our ancestors. Its cause and modes of propagation are well known. It is an infectious disease with a short period of incubation. From four to six days after infection takes place, a sudden loss of forces—often a full prostration, accompanied by a high fever—sets in. A bubo appears, and soon grows to the size of an egg. Death soon follows. If not—there is a chance of slow and painful recovery; but that chance is very small, because even under the best conditions of nursing, the mortality is seldom less than four out of each five cases of illness.

As to the means of propagation of the plague, they are many. The poison may infect a wound or a scratch; it may be ingested in food; it may be simply inhaled. Dust from an infected house was sufficient to infect healthy rats; and when infected rats were shut up in one cage with healthy ones, all caught the disease and died. Already in 1881 Netten Redcliffe and Dr. Picaon indicated that before the plague attacks men it destroys mice and rats. This was fully confirmed in 1894 by the Japanese and French bacteriologists Kitasato and Yersin, at Hong Kong, and by Dr. Rennie, of the Chinese Customs, at Canton. Masses of dead rats were seen in the streets of the infested parts of Hong Kong, and the keeper of the west gates of Canton collected and buried twenty-four thousand of these animals. Dr. Rennie also pointed out that among those inhabitants of Canton who lived in boats on the river there were no cases of plague, except a few imported from town, so that even rich Cantonese took to living in boats; and he explained the immunity of the boat-dwellers by the absence of infection through rats. The worst is, however, that swine, and even goats and buffaloes, snakes and jackals, are attacked by the plague. Yersin also remarks—what seems to be a very serious affair—that, without examining the microbes, it is not easy to distinguish between common rinderpest and bubonic plague among cattle.

As soon as the plague broke out at Hong Kong, the great Japanese bacteriologist Kitasato and the French doctor Yersin, who is well known for his work with Roux on the serum treatment of diphtheria, were already on the spot. Yersin obtained from the English authorities permission to erect a small straw hut in the yard of the chief hospital, and there he began his researches. Both Kitasato and Yersin had no difficulty in ascertaining that the plague buboes teemed with special bacteria, which had the shape of tiny microscopic sticklets, thickened at their ends. To isolate these bacteria, to cultivate them in artificial media, and to ascertain the deadly effects of these cultures upon animals, was soon done by such masters in bacteriology as Kitasato and Yersin. The *cause* of the plague was thus discovered.

It was evident that infected rats and swine—especially swine with the Chinese, who keep them in their houses—were spreading the disease, in addition to men themselves. The same bacteria teemed in the dead animals. As to men, the discharges from their buboes, and even, in many cases, their expectorations, were full of plague bacteria. Besides, Yersin soon noticed that in his "laboratory," where he was dissecting animals killed by the plague, the flies died in numbers. He found that they were infested with the same bacteria, and carried them about: inoculations of bacteria obtained from the flies at once provoked the plague in guinea-pigs. Ants, gnats, and other insects may evidently spread infection in the same way, while in and round the infested houses the soil is impregnated with the same bacteria. These were the first results which were communicated by Yersin to the Paris Academy in July, 1894, and, two months later, to the Buda-Pesth Medical Congress; but they seem to have been taken no notice of, two years later, at Bombay.

It is thus self-evident that the statement which so often recurs in the West European press—that Europeans have nothing to fear of the plague—leaving aside its moral aspects, is scientifically

incorrect. There are in Europe plenty of cattle, of whose diseases we know but little, plenty of rats and mice, ants and gnats, which cannot be stopped at the frontiers, plenty of rags imported from everywhere, and plenty of poverty and filth. Small colonies of Europeans in distant lands may escape the plague, but past experience is there to prove that Europeans enjoy no special immunity. To quote from Sir J. Lister's speech delivered a few months ago at Belfast:—

We know that a ship may carry the disease; that rats are liable to contract it, and that a rat making escape from a ship coming from Bombay, say, to the Thames or the Belfast Lough, may carry the plague ashore, and that the taint may be communicated to human beings, with dreadful results. I would not say that there are no slums in the city of Belfast which might not harbor the plague.

As soon as the pest microbe became known, experiments were begun, at the Paris Institut Pasteur, for finding the means to combat it; and in July, 1895, Yersin, Calmette, and Borel could already announce that some very promising results had been obtained. The method followed by the French bacteriologists was the same as had given them such brilliant results in the treatment of diphtheria: it was to confer, first, immunity against plague infection to some animal, and then to use the serum of its blood to cure other infected animals. After many attempts it was found that if a culture of the plague microbe was heated to one hundred and thirty-six Fahrenheit degrees for one hour, it lost its deadly virulence. It could be injected into a rabbit without killing it, and would only provoke a weaker form of the disease. After several such injections being made, the rabbit would support, without injury, a many times more deadly injection of pure microbes. The next step was to see if the serum of such a rabbit's blood would not act as a cure for plague; and so, in fact, it did. It cured the disease artificially provoked

in animals; and accordingly the explorers began at once to immunize horses, which would yield larger quantities of serum.

Thereupon Yersin returned to Indo-China, and, without waiting for costly buildings, started at Nha-trang a new "Pasteur Institute" in a small room turned into a laboratory, with a small stable, for a few horses, attached to it. To obtain larger quantities of an active serum was now his ambition. It must be remarked, however, that though the leading idea of serum treatment is plain, it is by no means easy to obtain serum endowed with the desirable properties, even when one has all the advantages of several years' special training and is familiar with the practical "next to nothings" which have been worked out by years of bacteriological practice at the Paris Institut Pasteur. The attenuated poison has to be injected in such doses, and at such intervals, that a fever reaction should be noticeable in the horse after each injection, but that it should in no way impair the health of the precious animal; and yet each injection must steadily increase the immunity of the horse—otherwise it would be useless. Only years of practice can teach how to conduct these extremely delicate operations, but their success can never be guaranteed beforehand. Out of several immunized animals, some will yield a serum of sufficient strength, while others will give but a weak preparation, and many of the failures in serum treatment are simply due to the weakness of the medicament.

In January, 1896, the plague reappeared at Hong Kong, but Yersin's horses had yielded small quantities only of serum of the required force. At last he received in June eighty bottles of it from Paris, and with this provision he started at once. But the disease was already coming to an end at Hong Kong, and he was on the point of leaving for Amoy, when one of the Chinese students at the local Catholic mission was caught by the plague. The young man being considered as lost, Yersin was allowed to try his cure.

Thirty cubic centimètres (about two cubic inches) of serum were injected, and next day it became evident that the young man was saved. Encouraged by this result, Yersin left a few bottles of the Paris preparation with the missionaries (who treated two more cases with success) and went to Amoy. In this town twenty-three cases were treated with the Paris serum, and in twenty-one cases recovery was the result, while at the same time the mortality at the hospitals was eighty per cent. It is only fair to say that the two patients who died were already in a desperate condition when they were brought under treatment—five days after the appearance of the illness. And yet Yersin considered that the Paris serum was still too weak. His small provision of it was, of course, very soon exhausted, and he was compelled reluctantly to leave Amoy.

In January last Yersin and Koch went to Bombay, where they were soon joined by the Russian doctor, Haffkine (who has stayed lately in India studying cholera and trying vaccination against it), and by the English bacteriologist, Mr. Hankin, from Agra. Of course Yersin's report on his experience in Bombay was expected with great interest. It appeared at last in April. Fifty cases in all had been treated since March last up to the 3d of April, with the serum which had been sent from Paris and which, as Yersin remarks, was still too weak, so that three to four injections had to be made in each case. Nevertheless, the results given in the *British Medical Journal* are most satisfactory. Out of seventeen cases which were treated on the first day of the disease, fifteen were followed by recovery and only two ended in death; out of another seventeen cases treated on the second day, six only ended in death; of third day cases there were twelve under treatment, out of which six were cured, but six had a fatal issue. Of three fourth-day cases, only one was cured; and one fifth-day case ended fatally, as may have been easily expected. It thus appears that when the serum treatment was re-

sorted to on the first day of the illness the mortality was only twelve per cent.; and when it was injected within the last forty-eight hours the death cases were seven out of thirty-four, that is twenty-one per cent. Altogether the treatment is described in the *British Medical Journal* as very successful, the only regret being that the supply of serum was soon exhausted, while a further supply of one thousand doses was eagerly expected from Paris. At the same time Dr. Haffkine, who experiments upon a totally different *preventive* vaccination method, is reported to have found in Bombay the means of rapidly preparing a certain vaccine against the plague which seems either to prevent the infection or to weaken its effects. His treatment is said "to be very popular throughout the entire Presidency," and up to the 2d of April, no less than 4,769 persons were vaccinated in Bombay city, and 1,368 in Poona, Bubar, Karachi, Surat, and the Thana and Kolaba districts. Natives and Europeans alike, according to the same periodical, most willingly go to the Russian doctor to be vaccinated.

All these news are certainly most encouraging. There is now full room for hope that the serum treatment will be as successful for plague as it has proved to be, in France, Germany, and Russia, for the treatment of diphtheria; and this fact, together with the Haffkine vaccinations, as well as the house-to-house sanitary visitations which have now begun in the infected districts in India, promises to reduce, to some extent at least, the effects of the terrible invasion.

IV.

If the serum treatment of the plague is still in its experimental stage, the serum cure for snake-bites may be taken as an accomplished fact. And when one thinks that in India alone no less than twenty thousand human beings die every year from the bites of the deadly reptiles, and that with a little organizing effort very many of these lives can henceforward be saved, the importance of this new achieve-

ment of the French bacteriologists becomes self-evident.

Like the serum treatment of tetanus and diphtheria, the new treatment for snake-bites was evolved in a somewhat circuitous way. Various chemicals, such as hypochloride of calcium or of sodium, and chloride of gold, were tried first as counter-poisons. Later on, as the chemical treatment proved to be very uncertain, another method was resorted to. Immunity against snake-venom, or rather a "resistance" to it, was produced in animals, either by the means of the same chemicals or by repeated injections of very small doses of the snake-venom, or by introducing it in small doses into food, until it was found much safer to confer immunity by means of injections of *attenuated* snake-venom. And after that, the serum of animals thus rendered immune was experimented upon as a *cure* for other animals into whose blood the snake-poison had been introduced. Finally, it was tried upon men who had been bitten by snakes.

Already in 1888 it had become known, through the remarkable researches of Kaufmann, that an animal can be rendered capable of resisting snake-poison if very small doses of the same be repeatedly injected in its tissues. Mr. Sewall and Dr. Kanthack fully confirmed and extended these conclusions by independent research. But, valuable as this first step was for further investigations, it had no immediate practical application; it would, of course, be impossible to vaccinate and re-vaccinate every man and beast in a country infested with snakes.

Consequently, the French doctor Calmette, who was in 1892 at Saigon, endeavored to discover such chemicals as could be used as counter-poisons in the human organism. The most interesting was that he really obtained some partial success with the above-mentioned chemicals; but the numerous failures of this method soon induced him, when he came to the Paris Pasteur Institute, to devote his attention to a more effective method—namely, the serum treatment. Two other French

bacteriologists, C. Physalix and G. Bertrand, worked in the same direction; and on the same day (February 10, 1894), both Physalix and Bertrand, and Calmette, read papers at the French Société de Biologie, to announce that they had obtained satisfactory and encouraging results by using the serum of previously immunized animals as a cure for snake-poison.

Since that time, Dr. Calmette has fully worked out his method. Already in 1894 he had convinced himself of the superiority of the serum treatment; but, as serum cannot be always kept in readiness in every village, and as some cures had been effected by means of chemicals, he recommended this last method in case of need.

Next year, *i.e.*, in May, 1895, Calmette published the quite positive results which he had obtained for the serum treatment. Small doses of attenuated cobra poison (heated to about 212° Fahr.) were repeatedly injected into rabbits; and after some time the little creatures were rendered so perfectly immune that a dose of pure cobra-poison sufficient to kill eighty rabbits could be introduced into the blood of one of them without any danger to its health. The serum of the blood of such rabbits, as was fully proved by many experiments, was endowed with a powerful curative property for other animals. Rabbits which were dying from inoculations of cobra poison recovered in a few hours when the curative serum was injected in their tissues. In September, 1894, Calmette began also to immunize donkeys, and it appeared that their serum was also endowed with such curative properties for snake poison that "cure was the rule." The serum treatment for snake-bites was thus found. There remained only to prepare large quantities of the precious liquid, that it might be distributed in the colonies, and wait till its properties should be tested on men bitten by snakes. The Pasteur Institute at Lille undertook this work.

Two months after the appearance of the just-mentioned paper of Calmette,

Dr. Fraser, who seems to have worked in complete ignorance of Calmette's previous two years' work, made a communication before the Edinburgh Royal Society on the same subject. He also had immunized rabbits by injections of very small doses of snake-poison, or by giving it in the animals' food; he also had experimented, upon animals, on the preventive and the curative properties of the serum of these rabbits, and he began to immunize a horse, but could not continue, having no snake-venom; and he also came to the fact that the serum of an animal vaccinated against the cobra-poison, had curative properties against the venoms of several other species.

In July last, Dr. Calmette was invited to London, to repeat his experiments upon animals before a Special Commission nominated by the Royal Colleges of Physicians and Surgeons. The results of these experiments were very impressive. "They proved," the Commission wrote, "to evidence that the serum treatment for snake-bites, each time that it can be employed without delay after the bite, must considerably diminish the mortality." Its use for both men and animals was warmly recommended.

These provisions were soon fully confirmed, and we have now, in the last number of *Annales* of the Pasteur Institute, full details about the cases which were treated with Calmette's serum (prepared at the Pasteur Institute at Lille) in India and elsewhere, only those cases being mentioned in which the species of the biting snake was known. The results are simply striking. Thus, last year, in January, a lot of living cobras (*Naja tripudians*)—all hungry, of course, which renders their bites still worse—was received at Salgon, and the box was opened in the laboratory. One of the young aids was bitten by one of these terrible snakes in the hand. The hand and the forearm were at once paralyzed, and serum could be injected only one hour after the bite; nevertheless, the young man, after passing a very bad evening, recovered during the

night. Two days later he resumed his work in the laboratory.

In India, at Nowgong, Captain Jay Gould saved a soldier of the Fifth Cavalry regiment who had been bitten by a *krait* (*Bungarus caruleus*) which was killed on the spot. The captain at once made a ligature to prevent the poison from spreading, and rode full speed to obtain the serum. The injection was made, and the soldier was saved. Another soldier, in Guinea, owes his life to the same treatment. He was bitten by a black *Naja*, which he killed himself, and was in a very bad condition when Dr. Maclaud injected the serum: he recovered in a couple of days. A third soldier was cured in the same way by Dr. Gries in Martinique. He and his comrade had caught a *Bothrops lanceolatus*, and they were going to put its neck into a split stick, when one of the two comrades was bitten by the snake.

The most striking cure was made at Cairo, in October last. A girl, thirteen years old, was bitten in the forearm by a snake at Gizeh while she was picking cotton. It was then between three and four in the afternoon, and only at seven she was brought to the hospital in a desperate condition. When the doctors—Professors Keatinge and Dr. Ruffer—examined her, at half past seven, she was in a state of full collapse. The pulse was hardly felt at all, the pupils of the eyes showed no reaction to light. Twenty cubic centimetres of serum were injected under the skin in the abdominal region. At eleven an amelioration in the state of the poor girl became evident, and another ten cubic centimetres of serum were injected. All next day the girl remained drowsy, but recovery set in, and she was saved. Dr. Jorues, of the Cairo Zoological Museum, has not the slightest doubt about the snake being a *Naja haje*.

In twelve cases, of which I mention the most characteristic only, the treatment was attended with full success. Besides, many other cases were treated, always with success, but they are not mentioned because the snakes were not

caught, and there may be some doubt as to the snakes having been venomous—which is a justifiable but not absolutely necessary caution, because non-venomous snakes, as is only too well known to snake charmers, do not bite. The best of it is, however, that the preparation maintains its curative properties for a relatively long time. Serum which was sent to India, and was returned one year later from Agra to France, was as effective as if it were freshly prepared.

Of course, further experiments will be required before medical opinion is definitely settled upon the serum-therapy for snake-bites. But these first results are decisive enough, and they are sure to give serum-therapy a new impulse, the more so as science seems to be on the eve of another important discovery—namely, the means of obtaining curative serum in a quite novel and simpler way. But of these new researches, made in Russia by Dr. Smirnoff, as well as of the results obtained by Dr. Haffkine with cholera vaccinations, and Koch's new tuberculin, more will have to be said on some other occasion. They belong to a different domain, in which new vistas are opened upon the very substance of bacteria poisons, as well as upon the structure of blood.

P. KROPOTKIN.

FROM THE ITALIAN OF NEERA.

THE AMULET.¹

Translated for THE LIVING AGE by Mrs. Maurice Perkins.

PART V.

It snowed for three days in succession: a white desert separated me from every other being. I learned from Pietro that the roads were impracticable, which seemed a sufficient excuse for my cousin whom I had not seen for two weeks, so that I was much surprised one morning to see him before me.

¹ Copyrighted by The Living Age Company.

"I am here by chance," he said presently, "I am going on an urgent errand, to seek the doctor for my neighbor, who is desperately ill, and I thought I would stop in to give you a word, because I have no idea when I can come again."

"I beg you not to take any such trouble for me."

"Women are very punctilious."

I interrupted tranquilly, "I don't think I have ever given you reason to think so: hereafter remember that I consider you as absolute master of your time."

He did not answer, but following the direction of his thoughts, he said aloud, "They are really to be pitied."

I saw that he was very much affected by the illness of his neighbor, and I asked news of her.

"Do you really wish to know? I thought you did not approve of these ladies."

"I do not know them and I do not judge them, but you like them, and that is enough to give me an interest in their grief."

He regarded me intently for a second, then looking down on his cap and shaking the flakes of snow from it, he continued:—

"The mother has only two or three days to live, and the daughter is alone in the world."

"God have pity on them," I said with sincere commiseration, "I will pray for them with all my heart."

Another flash from his eyes, another long silence, then he said, "Adieu."

"Au revoir," I murmured, with a grief that was half tenderness.

"Yes, au revoir."

He seemed to fear that he had been too kind, and added:—

"It will not be very soon."

All day I struggled, a prey to conflicting wishes. I followed him in imagination to the pavilion where the strangers lived. I could see the dying mother in her bed, and the desolate, broken-hearted daughter, and him going from one to another. O, he must love her! A contraction of my heart warned me that my sacrifice was not yet consum-

mated; that I had more tears to shed and more rebellious desires to crush.

The next morning I sent Pietro to bring me news of the sick woman. She was very ill. Then, all of us, Ursula and Pietro and my little Alexis recited the prayers for the dying. When we had finished them, I said, "Let us pray again that if it is God's will this mother may be spared to her daughter."

Ursula came close to me, and putting her trembling lips to my ear whispered:—

"God bless you, Myriam."

"O why?" I said, feeling the blood mount into my face.

The good old woman said nothing, but as she bent her head on her joined hands I thought that perhaps she was praying for me. Towards evening a travelling merchant brought news that the strange lady was dead, and that her daughter had thrown herself upon the body, and in her despair seemed to wish to follow her.

"Is there no one there to comfort her?" I asked.

"Who should there be? La Querciola is perfectly isolated, and the ladies do not know a single soul."

I looked around me. I looked out of the window, over the desert of snow, I looked up at the white sky. Poor child!

The pedlar was preparing to go on, and already had his pack on his shoulders, when I asked him if he could get me a carriage before night. He said he could, and in spite of the consternation of Ursula and Pietro, I ordered him to send me one without losing any time.

I kissed Alexis, who was hanging to my skirts, asking:—

"Mamma, why do you cry?" I did not know. I did not even know that I was crying.

I made my preparations with much emotion, and warning my people that I would bring the orphan back with me, I told Ursula to have a room ready for her.

La Querciola was not more than half an hour distant, but we took twice that time to break a road through the

frozen snow, on which some hungry crows were flying about. In this wan landscape, no longer veiled with climbing plants and roses, la Quercia rose up before me with its strange architecture, looking like a fortress and a convent in one. I was driven to the door of the pavilion which was opened by my cousin himself.

"You!" he exclaimed, and no words could express the exaltation in his look and voice.

Standing on the threshold in a whirlwind of snow I hardly knew how to justify my presence, but it was he who took me by the hand with gentle firmness, and very quickly in a few words I explained my purpose.

He took me immediately to the young woman, who saw me enter without astonishment. She heard my first words with the apathy of a person half insane with grief. Her room was bare and cold; there had been a fire, but it had not been cared for. As I looked at her I did not think of the elegant young woman whom I had seen in church. Her hair was disordered, her hands were blue with cold; there was something desolate, abandoned, terrified, that speedily found its way to my heart. If I had ever indulged sentiments less pure, less noble, they all disappeared before this real suffering.

My cousin, who looked at me intently, knew what was passing through my mind. He took her hand and putting it in mine, said earnestly:—

"Trust her; she is a friend."

No one had been able to persuade her to rest, or to eat. In all the neighborhood, there was not a single person who could offer her hospitality, or a single woman who could comfort her. The night drew near, terrible and agonizing. I bent over the poor child and said as gently as I could:—

"Will you come home with me?"

She started, and looked at me doubtfully.

"Do not be afraid. I am a mother."

At these words she burst into violent weeping and hid her head in my bosom.

Little by little we persuaded her; my cousin promised not to leave the house,

and assured her that her mother's body should be watched over religiously. Then she acquiesced, and I went away with her in the closed carriage, across the desert of snow which was a fitting frame for our two griefs. My cousin stood upon the threshold until the carriage drove away. His expression was deeply serious and gentle.

Ursula had a good fire ready and warm drinks. She helped me as much as she could, to sustain and comfort the desolate girl.

A little later when we had taken her to her room, and she had fallen asleep, I thought of her, resting safely beneath my roof, confided to my care, protected by me, and a great flood of happiness overwhelmed me, and I thought that at that moment his spirit might be close to mine.

I sat up late that night, reading over a long, complicated letter from my husband. He said that he had made up his mind definitely to establish himself in Paris, in view of a position in the Embassy, and that it would be useful to have his family with him; that Alexis was old enough to begin his education, and if I had no objection he would like to have me join him at Paris with the child.

The reflections which this proposal aroused were of a nature to keep me from sleeping, coming as they did in this solemn moment mingling themselves with other thoughts and other preoccupations equally important. My life was changing; it was turning in a new direction, with new duties, new struggles, perhaps.

The orphan was still dressing in her room, when my cousin came to make the arrangements for the funeral. I was standing on the landing of the stairs with a wreath of immortelles on my arm. Divining its destination he colored vividly as if with pleasure; then with a pallor as sudden, he said with a noble simplicity:—

"I did not know you, Myriam. How good you are!"

No words could ever sound so sweet as those, but I heard them in such agi-

tation that I was forced to cling to the railing for support. Then he said:—

"Will you forgive me?"

My God, what joys there are in this world! My hands trembled beneath the immortelles, and I bent my head to invite him to go with me, and also to tell him yes. Did he understand my silence?

The grave and painful occupations of the day left me no time to be alone with him or with myself, but my heart overflowed with joy.

I decided to keep the young girl with me until she could go to a relative, an old friend of her mother who would take care of her, and provide for her future. In the mean time I helped her, and comforted her, and wiped away her tears. I was surprised at my own energy and courage; the poor child showed her gratitude in the most touching manner, and the calm days flowed along full of melancholy sweetness.

A secret instinct prevented my asking my cousin about his plans for the future, especially as he said nothing about them himself, and when the young girl had gone he resumed his affectionate, assiduous visits as if nothing were changed around us. Better still, it seemed only as if I had had an evil dream and was in the joy of awakening from it.

One evening—he sometimes came in the evening—I told him of my decision to join my husband in Paris. The unexpected news startled him, but at bottom he did not believe it. He looked at me keenly to see if I had any hidden meaning, and a sudden suspicion flitted across him.

"Why do you think of going to Paris at this time?"

I took my husband's letter and read it to him, reminding him that Alexis was seven years old, and if his father wished to interest himself in the child, I ought to second him with all my power.

"At the bottom of your heart you would like to go to Paris. That is it."

I do not know what sort of expression of distress rose to my face, but he added quickly, and sympathetically:—

"No, no, Paris is not the place for you; it will be worse than a desert for you, and your heart will be always turning back to this house and this country."

"Yes, I know it."

"And all that you leave here."

"And all that I leave here."

With these words we stopped. I had the impression that some one in the room was watching us. Perhaps it was the hours full of light and darkness that would never come back again.

"What will become of these sofas and chairs, the work tables full of you and your perfume?" He said this in the laughing tone which he used often to conceal some deeper emotion.

"They will sleep under their grey linen covers."

"And your two old servants?"

"Poor dear old people!"

"And I?"

"Ah! you——"

One of those hours that listened to us must have trembled in its phantom vail; it seemed as if something palpitated in the air, as if I were seized by invisible hands. He repeated in a low voice:—

"What will become of me?"

"You," my voice was hardly a whisper, "you must marry."

"And if I will not marry?"

I was silent. He repeated vehemently, "And if I will not marry? Answer!"

He had not made one step towards me, he did not move, but a flame burned in his eyes.

I measured all the greatness of the temptation; I saw its ineffable sweetness. There seemed to arise out of an unexplored darkness phantoms of rapture and passion. One single word and he was mine. I felt it! In this blessed solitude, far from the world, in the awakening spring, in my heart which was open to love, which trembled and palpitated under the tenderness of his glance! All would begin again; the enchanting evenings, the confidential talks, the unreserve of heart, the joy of being together. My longing was so

violent that it shook me. But what did he see of this? With my head bent above my work, I tried to count the stitches, and not till I had succeeded did I speak:—

"You would be wrong; the ways of dreams are many; the path of life is one. You must marry."

"Are you in earnest?" he said, fixing his eyes on my face.

I felt that a single moment of weakness, and I was lost forever!

"I am," I answered.

He darted a keen glance at me, and bent his head.

This was one of our last talks. Having written to my husband saying that I was willing to join him, he answered that he would be glad if I would hasten my departure as much as possible, so that he could come to meet us.

Circumstances helped my will.

The winter was almost over. The temperature was softer, and here and there the snow was melting. In my garden, lying exposed to the sun, there was not a trace of it left. I looked at the bare branches of the acacias, and thought with sadness that I should not be here to see them bloom.

"O dear mistress," cried Ursula, weeping, "when you come back, I shall be dead."

From her, too, I had to hide my anguish while I bade farewell to all the plants, to all the stones, to all the walls. When I went to church, the last Sunday, I bade farewell also to distant *la Querciala*, evoking from my memory that beautiful day when I had visited it with other eyes and another heart.

"I know," I said to my cousin as we stood by the piano gathering my music together, "that I shall come back some day to this dear place and to these dear objects, but shall I find them as they are now?"

"Be sure of it. As life goes on, what is lost is the materiality of things. The spirit of things is immortal; it is that which we love in them."

He knew always how to say at the right moment, the thing which would go deepest. After a pause he said:—

"Do you intend to take this music with you?"

I was confused for a moment, and the keys of the piano sighed out the pathetic tones of the old song, but I answered quickly:—

"Perhaps I must."

A secret involuntary feeling must have betrayed itself in my voice, for he made no account of those three words, but divined through them a deep tenderness. I saw then his noble face light up, and his soul came out to me, confiding and entire. Was not this what he had dreamed of in the dawn of his affection, long, long before the obscure mystery of the senses had blinded him? Had he not been thinking of this, that memorable evening when he had said:—

"You cannot imagine the good that a woman can do in bringing faith back into the heart of a sceptic?" And he understood this above all, that only from a noble source could spring a love like mine. This I believe; otherwise there would not have been such serenity and gentleness in his look.

There could be no longer any doubt. As he stood silent in the shadow I saw arise in him a longing for companionship which was touching in the virile pride of this soul. Then I thought, "Some woman, Emma, or some other, will come to take her place in his empty house, in his passionate heart. Many changes shall I find when I come back in a few years. Many dead flowers, many dead things, and in me also, something dead,—but what could ever take from me the supreme joy that I had given him faith!"

I was near the window; I raised the flame-colored curtain and looked out on the garden. In the early days of our acquaintance, my cousin had said that it was too orderly, too well kept. He said it had none of the poetry and mystery of abandoned places.

Now, I thought, now it will clothe itself with all the poetry that he misses. He will see neglect weave its webs across the flower beds, he will see sadness, he will see mystery obscure the shadows of the trees and no longer will

our spirits beat together in the paths where, without confessing it, we loved each other.

He came and stood beside me and took my hand; still my thought flowed on, my eyes looked with love at the dear rose-trees that would soon break out into flower under the March breeze, when I heard his grave voice:—

"Then this is farewell, Myriam. Shall we meet again?"

I pressed his hand with a light prolonging of my grasp, I did not turn my head, I did not look at him, I did not speak, but he knew at last what grief and passion lay in my silence.

THE END.

From The Fortnightly Review.

PASCAL.¹

Pascal is one of the great men whose minds have been fascinated by the eternal riddle of existence, and have carried to a logical conclusion one typical mode of meeting if not of answering it; and who have also had the gift of coining thought into language so terse and vivid as to be part of the intellectual currency of future generations. Yet the thought even of such men had to be expressed in the dialect and applied to the particular circumstances of their time. It may be worth while, therefore, to consider in what way Pascal's view was colored by the conditions of the day, and what are its true relations to the development of thought. I make no claim to the special knowledge which would be necessary for a treatise, and am content to refer, once for all, to Ste.-Beuve's admirable "Port Royal," in which the great critic has shown Pascal as a living man among his surroundings, and pointed out with incomparable skill his relation not only to the religious and philosophical, but to the social, political, and literary movements of a profoundly interesting period. I shall only aim at setting out one or two cardinal points.

First of all, Pascal came at a great period: at the time when philosophic

systems were being stirred by the influences named after Descartes and Bacon; when the greatest minds were breaking off the fetters of effete scholasticism; and when it was possible for men of the highest order to take a Pisgah sight of the promised land of knowledge without being distracted and bewildered, like their successors, in the complexity of actual explorations of the region. In one respect Pascal was especially qualified to take part in the new movement. The philosophy of Descartes was essentially a philosophy for mathematicians, for mathematics, at that time, represented the decisive example of intellectual progress. Metaphysics, it seems, might at last become progressive if, instead of wearily rambling round the old dialectical circle, it could adopt similar methods. Descartes laid down the principle. Spinoza's "Ethics," appropriating the forms of geometrical demonstration and presenting the whole universe as an incarnate Euclid, shows the rational consummation of the experiment. Now, Pascal was obviously a heaven-born mathematician. By the age of twelve, we are told, he had thought out for himself the elementary propositions of Euclid; by nineteen he had invented and constructed a calculating machine, and obtained results which were important steps towards the differential calculus developed by Newton and Leibnitz. In his last years, when attacked by a bad toothache, he returned to the studies which had long been thrown aside, and in a few sleepless nights discovered certain geometrical theorems. His results were published, and the mathematicians of Europe challenged to find out the proof. After three months' labor, Wallis, the ablest English mathematician of the day, produced a proof—not, it was said, satisfactory. Patriotism induces me to add that Wallis had no toothache to stimulate him. At an early age, however, Pascal's health had broken down; from his eighteenth year until his death he never had a day free from pain. His first conversion, at the age of twenty-three, induced him to throw aside scientific activity as a worldly vanity. He became closely as-

¹ Lecture before the West London Ethical Society, May 2, 1897.

sociated with the remarkable Port Royal community, and appeared as their champion in the "Provincial Letters" in 1656. The "Provincial Letters" marked an epoch in theological disputes and in literature. His friends, put on their defence, had entangled themselves in hopelessly intricate controversies, devoid apparently of all human interest. Pascal put the point so clearly and with such dexterous irony, that not only the religious world but the world of laughers and of sensible men—rightly powerful in France—came to his side. When he had finished, the great Society of Jesus was stamped with an opprobrium from which it has never been able to free itself, and Pascal had created, once for all, so the highest authorities assure us, a model of admirable French prose. He showed for the first time what we all now know, the unrivalled fitness of his language for clear, logical, convincing statement; and in his hands the perfect form was the more impressive because it everywhere indicates, and is yet never perturbed by, profound conviction and a deep glow of moral indignation. From controversy with the Jesuits he turned to controversy with the Rationalists. The "*Pensées*," as we have them now, are but a fragment of an intended vindication of Christianity. As we had them till lately, they were a fragment distorted by the labors of pious editors. After a year's labor, Pascal had sunk into such feebleness that for the last four years of his life he could only jot down disconnected thoughts. And yet the book, pieced together by well-intentioned friends, made an impression which has hardly grown weaker with time. That a man, dying before forty, immersed in ascetic practices, and having to struggle against constant infirmity, should have produced so great an effect in philosophy, in science, and in literature, is astonishing; and I think that, even among the great men of a great time, there is no one who excites more the sense of pure wonder at sheer intellectual power.

What was the result of his thought? Eminent critics have puzzled themselves as to whether Pascal was a sceptic or a genuine believer; having, I sup-

pose, convinced themselves, by some process not obvious to me, that there is an incompatibility between the two characters. We shall perhaps see the relation more clearly hereafter. I can subscribe, at any rate, with one remark made by Ste-Beuve.¹ "You may not cease to be a sceptic," he says, "after reading Pascal; but you must cease to treat believers with contempt"—possibly because you will find how near they come to sceptics. At any rate, it is well to unlearn contempt for anybody; and, if only for that reason, it may be worth while to consider Pascal's position a little more closely. We shall do so best, I think, by considering the central theory which connects the "Letters" and the "Thoughts," and gives the real starting-point of his speculation.

The "Letters to a Provincial" open by an exposition of certain disputes about grace, which call up faint memories of the endless and intricate controversies of the time. The technical terms, justification, sanctification, election, grace, predestination, and the like, still occur in respectable text-books of theology, like fossils which show what strange monsters once cumbered the earth. Yet the discussions were the temporary embodiment of inquiries which still interest us profoundly in a different dialect, and involve really vital points of morality. The creed represented by Jansenius has carried on an intermittent warfare with its antagonist at the critical period of Christian theology. He had declared himself to be simply reproducing the teaching of Augustine, who had elaborated the teaching of St. Paul; and, under the shelter of those infallible authorities, Jansenius roundly declared that the whole system accepted by Catholic divines of his day was a perversion of the truth. The great Reformer Calvin had founded his edifice upon the same base, and to make room for it had demolished the authority of the pope. Naturally Jansenists were accused of sympathizing with that abominable heresiarch, and, strongly as they denied the consequence, of being logically bound to abandon either their doctrines or their loyalty to the Roman Catholic Church. Augustine's au-

¹ *Causeries du Lundi*, vol. v.

thority, of course, might not be openly assailed; how then did the doctrines of Calvin and of Jansenius—professedly applications of Augustine's—differ from it and from each other and from the accepted system? Such problems presented a wide field for the subtlety of theologians, and they were not slow to take advantage of the opening and to pile up libraries of distinctions and confutations and interpretations. Beneath the technical questions lay the real question. What is virtue? Undoubtedly, according to the theologian, it means conformity to a divine law, and it implies the divine grace which disposes the heart to conformity. But which is the ultimate standing-point? Shall we consider morality as a law imposed from without and enforced by sanctions of heaven and hell, or as defining the state of the heart or the will, which makes the "law" the spontaneous expression of conduct? "Law" has in one case the juridical sense, and refers to a compulsion exercised upon the will; in the other, the scientific sense, and refers to the intrinsic character of the will itself. An emphasis upon one or other aspect of the question leads to indefinitely varying shades of opinion and a boundless exercise of metaphysical subtlety. But one practical application meanwhile shows its vital importance. If you can regard morality simply as an "external" law—comparable to human law—and then, as a system of rules enforced by spiritual penalties and administered by priests, you leave the road open to all the abuses which provoked the Reformation. The Church holds the keys and can absolve sin. A corrupt Church may use its power in the interests of spiritual tyranny and pervert the morality of which it becomes the official guardian. The sinner escapes the consequences of his sins by submitting to an external process: he is pardoned, not because his heart is purified, but because he has paid his fine to the representatives of God on earth. The Reformers, therefore, insisted upon a doctrine of justification by grace to cut up the system of sacerdotal power at the roots. The conversion of the heart, they said, was everything; the external conformity nothing; and the sacraments

in general became mere commemorations—useful so far as stimulating the imagination, but not of themselves possessing any supernatural charm.

The Jansenists, accepting the same principle, stopped short at the critical point. Though they laid equal stress upon a change of heart, or "conversion," which has the same prominence with them as with the Calvinists or our English Methodists, they also held most strenuously that the sacraments were divinely appointed means of conversion. Thus they represented, as their antagonists said, a semi-Protestantism, which had illogically to combine a belief in the supernatural character of the sacramental system and the priesthood with an insistence upon the paramount importance of the change of heart. This indicates the line upon which Pascal came into internecine struggle with the Jesuits. The opening letters which touch upon certain problems about sufficient and efficacious grace show extraordinary skill, but are chiefly directed to unmask the dexterous equivocation which enabled one wing of his antagonists who really admitted the Jansenists' position to condemn it under cover of an ambiguous term. These do not go into the argument itself. But Pascal presently advances to the moral problem. Then he comes to close quarters; he denounces the Jesuits with astonishing vigor as corrupters of morality at its very source; as sanctioning lying, manslaughter, and impurity; as teaching doctrines wholly opposed to the law of Christ; and briefly as deserving of all that the most bitter Protestants have ever said of the Scarlet Lady. I have no pretensions to judge of the justice of Pascal's attacks, though I cannot avoid a strong suspicion that he hit some very weak points; but for my purpose it is enough to assume his sincerity, which is beyond a doubt, and, taking his statement of facts for granted, to consider the logic of the assault. What, then, was the system attacked? The Jesuits, of course, were the most devoted adherents of the Church, and in that capacity the supporters of its system of government. The Catholic is not only a believer in certain dogmas, but a subject of a great ecclesiastical hierarchy. He

is governed throughout the whole sphere of conduct by an elaborate code of law, the administration of which is confided by the Church to the confessor. The confessor must have some definite rule to estimate the importance of sins and to know the conditions of pardon. Such a law has been elaborated by the casuists. They had put together a code of spiritual legislation, coinciding in some directions with the ordinary laws of the State, but in others going into every conceivable detail of conduct with which the merely human legislator is incompetent to deal. It was, in short, morality made into law. Here, then, we have the utmost possible elaboration of that view of morality against which the Jansenists protested: the view which assimilates it to an external or municipal law, differing from such law only in the nature of the sanctions—in substituting hell or purgatory for the gallows or the prison—and the all-comprehensive nature of its subject matter. Not only every act which affects others, but every act affecting the man himself, and even his most secret thoughts or intentions, may come within its purview.

We must notice the way in which this system presented itself to Pascal. The casuist, in the first place, has to classify sins as the secular legislator classifies crimes. This act, says the legislator, is murder, that, only manslaughter. The law must define, that it may not be arbitrary; it must define by external or tangible facts because the judge cannot look into the heart; and it must define actions taken by themselves, not apart from the life-history of each particular agent. Deliberate killing under certain conditions is murder, whoever commits the action and whatever his motive. It follows that actions of the most varying moral quality must be classed together. Murder may imply the deepest depravity or admit of palliation to an indefinite degree. To assign the moral guilt implied by the criminal act you would have to take into account all the concrete circumstances of the case—the man's whole character, position, training, and his intellectual capacity; in other words, to consider precisely the aspects which the legislator is com-

peled to neglect. It follows that the criminal law can only correspond in a rough way, or on the average of cases, to the moral law. But then the legislator does not profess to identify his law with morals. When, however, you profess, as the casuists professed, that you are interpreting the moral law itself, and declaring what is the morality of an action in the sight of Omniscience; and when, at the same time, you are forced to adopt the legislator's method—to classify acts apart from the agent, to say this or that act is wrong whatever the concrete circumstances or the motives which led to it: you are at once both claiming to be a moralist and omitting the characteristically moral aspect. You are trying to define the intrinsic quality of conduct by circumstances which are of necessity more or less accidental. Here, as I think, is the fundamental difficulty, though it is not presented exactly in this way by Pascal.

Pascal's indignation was roused by results which follow logically from this position. He specially attacks the two great doctrines of the Jesuits—the doctrine of "probability," and the doctrine of "intention." By their help morality may be moulded and perverted to any extent. What, then, are these doctrines? The analogy of law gives the explanation. The English law, for example, has been developed by familiar processes. As new cases arise, they are decided by the judges, who, while nominally applying the settled rules, are in reality extending and modifying them. Apart from direct legislation, the law is constantly growing by such decisions, and each decision becomes law by becoming a precedent. Now, in the case of morality, new legislation was out of the question. The law had been given once for all in inspired writings. But the divine law summed up the principle in a few maxims, and what was necessary for the confessor was a system of rules applicable to particular actions. "Do not lie." But what precisely is lying? When is lying a mortal or a venial sin? and are there any exceptions when lying is right? The confessor must have his rules, and they were given to him by the casuist. The casuist composed the professional text-

book, and, so far as he gained authority, the text-book eventually made the law, like the decisions of the English judges. This is the doctrine of "probability." When a writer of gravity had said that this or that action was permissible, his view became "probable," that is, it made a precedent upon which you were entitled to act. If a given action was permitted by any man of authority, it could not be assumed to be a sin, even though it had been condemned by others. It would be hard, obviously, to punish a man for doing something which had been declared to be innocent by a judge of the highest court. Such a decision was at least law in the making, and, until implicitly condemned by the Church, must be regarded as establishing a presumption, and therefore a right to act upon it. Hence morality changed. The great Doctor Diana had by his authority made opinions probable, and consequently actions, sinful before, had now ceased to be sins. Pascal found a happy illustration in the case of one Jean d'Alba. He was a servant in a Jesuit College, and confessed to the judges that he had stolen some of the plate. He had, however, looked into his masters' books, and justified the theft by an opinion of the excellent Père Baume. A valet, that casuist had said, might steal some of his master's property if his wages were insufficient. The opinion of Baume was enough to establish a probability: John held that his wages were insufficient, and therefore could steal without sin. The secular judges declined to accept the doctrine; but Alba disappeared, and it is apparently implied that his Jesuit masters had seen the force of his appeal to their principles.

The case shows how the law might be developed; and another result shows how development might amount to inversion. A great part is played in English law by what are called legal fictions. Lawyers have been able in many most important cases to alter the law by ingenious devices for applying to one case rules primarily and ostensibly intended for others. The same system in casuistry involved the doctrine of "intention," and its application may be

made clear by one very important case. The Church had condemned usury absolutely. It is wrong to take interest, because you have only a right to the return of exactly what you have lent. When it became clear that to condemn usury was to condemn commerce, the law had to be tacitly modified to conform to the new conditions. The casuists achieved this result, as Pascal tells us, by an ingenious device called the *contrat Mohatra*—the main principle of which is simple. I give £1,000 to a man and agree to receive £1,100 a year hence. Have I not lent money at ten per cent. and committed the sin of usury? Not a bit of it! I simply bought goods at a low price and paid the money. That, every one agrees, is permissible. Soon afterwards, indeed, I sold the same goods to the same man at a much higher price, and allowed him to pay me for them at a later date. These were two separate transactions, and in each of them I was perfectly justified. Therefore I was justified when I combined the two. Considered from the legal point of view, such devices may be a necessary though clumsy and indirect mode of altering an antiquated law. If the prohibition of usury be superstitious, it may be well to circumvent it by such circuitous means. But when the legal method is applied to a moral law, when you at the same time affirm the moral law to be divine and immutable while you are eviscerating it of its whole substance, you are playing fast and loose with morality itself. The device in this case, which admits of innumerable applications, is what was called directing the intention. I elaborately pretend, that is, to be doing one thing when I am doing another, and succeed in getting the benefit of one wicked action by doing two harmless actions, and averting my mind in each case from the action which is to be its complement. So duelling is forbidden. But it is surely not forbidden to defend my life or honor. I may, again, tell a man without sin that I am going to take a walk in a field and shall probably have a sword by my side. If he goes there, too, and attacks me, I may rightly resist him, even by running him through the body; and I shall have done nothing

that does not come under the head of self-defence. Pascal says that, by similar devices, it was shown that a member of a religious body might murder a man who intended to spread scandal about his society, and discusses the ingenious problem which had been raised as to whether a Jesuit might not on this ground murder a Jansenist. The murder has been forbidden, but only for the reason that the attacks of the Jansenists upon Jesuit morality were too feeble to do real injury to their adversaries—a ground which, as Pascal slyly observes, it might be difficult to maintain on behalf of the author of the "Provincial Letters."

I have gone so far into this to point out the real underlying contrast. Essentially the struggle is between the view which assimilates the moral law to the positive law, and that which makes it define the heart or character; between the law which says "do this" and the law which says "be this." The ultimate moral principles, understood as defining the qualities of the heart, may claim to be immutable and eternal. Love your neighbor as yourself! It has been said, sums up the whole of your duty to men, and is true in all times and places. Substitute for this an external law—an attempted catalogue of the precise actions which I am to do if I love my neighbor—and you must at once have innumerable exceptions and distinctions: the law must alter as circumstances change; and actions be classed under one clause or another, according to superficial distinctions which sometimes, as we see, enable you to get the benefit of one law by combining two innocent actions. Therefore, if you attribute the immutability of the internal law of the heart to the external law of conduct, you are forced to equivocate and have recourse to subterfuge. When, again, the process is carried on, as Pascal held that the Jesuits were carrying it on, with the distinct purpose of accommodating the Church to the world, and obtaining wider influence by lowering the price of obedience, it is no wonder that he condemned, as the Puritan in all ages condemns, the shuffler. Behind this lies a still deeper question. From Pascal's point of view, forgiveness must be an

empty word except as a consequence of a change of heart: a man should desire, not escape from the penalty of an action, but purification of the soul from the passion; not absolution won by the magic effect of a sacrament, but conversion and regeneration. From the Jesuit point of view the case was inverted. Absolution must really remit sin, or the power of the Church loses its virtue, and the keys cease to turn the lock. In the Jesuit view, you keep a debtor and creditor account: your score must be fully cleared when the fine has been paid for each separate sin. If the external law be the moral law, conformity to it must be sufficient in the sight of God as well as of the priest. One striking consequence is given in the tenth letter, where Pascal's indignation raises him to the highest pitch of eloquence. The problem occurred as to what state of mind was sufficient to secure absolution. Must your remorse imply love of God, or is it enough to be afraid of hell? Fear of hell may of course prevent a bad act, and leave a corrupt heart. If, however, it secures obedience, does it not remove guilt? The Jesuits, according to Pascal, accepted the result implied by their logic. Suarez thought it enough if one loved God at any time before death: Vasquez, if in "the article of death;" others, if at baptism; others, on fast days. Hurtado de Mendoza considered that one ought to love God once every year; Coninck, once in three or four years; Henriquez, every five years; while Father Sirmonet decided after discussing these opinions that one need not love God at all if one obeyed His other commands. God, he argued, wants us to love Him simply in order that we may obey His laws. If, then, we can obey Him without love, He would be unreasonable to insist upon a different motive. Queen Victoria, we may say, may demand obedience from her subjects, but she does not claim a legal right to their personal affection. That singular avowal rouses Pascal to one of those passages which score an indelible brand upon the adversary. The love of God was the great commandment, and the Jesuits have succeeded in explaining it away and paying

God compliments for not enforcing so harsh a law!

Here we reach Pascal's fundamental point: To be good is to love God. The sinner's heart, then, must be changed; not the correct blood fee paid for a homicide. No mere external operation can avail to reconcile man to God. Then, we may infer, dipping a baby in water will not avert damnation? From that conclusion, which appears to be plausible, Pascal recoiled, though he saw the difficulty. We shall see his answer. Meanwhile, another perplexity follows. You demand a change of heart: but how can the heart be changed? Can a being change not only his conduct but himself? If not, the change must be supernatural. Nothing but divine grace can make the man good. St. Paul and Augustine and Calvin have given definite form to this result by the doctrine of predestination. What, then, becomes of the free-will which, it was urged, was essential to merit? You give a higher place to morality by making it a function of the heart instead of a restraint upon actions; but in doing so you have made it unattainable by man, and therefore destroyed his responsibility. The theory of grace, as St. Paul put it, makes man the pot in the hands of the potter. The Creator and not the creature is the true cause both of vice and virtue. Admit that man can do nothing without grace, and he becomes a mere automaton moved by the arbitrary power of God. Suppose him, on the other hand, able to do something, and that God will always help him, and then you virtually make him do everything; for the grace of God is, so to speak, a constant condition which will be an inevitable consequence of the man's free-will. Pascal, of course, was sensible of this logical difficulty, and in dealing with it falls into subtleties resembling those of his enemies. It indeed appears to be impossible, except by the help of merely verbal distinctions, to divide the provinces of the two, or to make anything of either without virtually mixing up everything.

This problem is one which still exercises many minds in different dialects; and I, of course, am content to notice the fact. It indicates also the connec-

tion between the "Provincial Letters" and the "Thoughts." The problem which has met Pascal in the controversy with the Jesuits is really besetting him in the "Thoughts," and there he finds the solution which on one side is sceptical and on the other orthodox. For Pascal, as for the great men whom he follows, the starting-point is precisely this identification of all goodness with divine grace. Augustine, more fitly than Spinoza, might be called "God intoxicated," and in the "Confessions" we have the most impressive example of an imagination which interprets the world as everywhere permeated by the divine presence and the heart moved by a sense of personal relation to its Creator. Pascal gives an embodiment of the same pervading sentiment, and his work involves one dominant thought: If you attribute every good impulse to the Creator, what is left for the creature? Clearly only the bad or the absolutely neutral. Belief in divine grace, thus understood, has, therefore, for its correlative doctrine the corruption of man. If all that is good be supernatural, the natural must be other than good. And this is, in fact, the doctrine around which all Pascal's "Pensées" revolve. The doctrine of the corruption of human nature is, he says, mysterious, and yet it is this mystery alone which makes man intelligible to himself. Christianity, he says, reveals two great truths: the corruption of man's nature and the redemption through Christ. It is in passing these two opposite poles of truth alternately that he sometimes appears as a sceptic and sometimes as a humble believer. He joins hands at moments with the sceptics and the pessimists: he even outdoes their strongest assertions; and at the next moment he is prostrating himself before the Church, accepting mysteries, adoring the sacraments, and arguing for the most groundless traditions, and believing (I say it with a certain sense of shame) in the most trumpery of modern "miracles." The modern agnostic or the modern worshipper at Lourdes may equally find support in his *dicta*. At any rate, in this lies, I think, the great interest of Pascal. The extraordinary force with which he

sums up both sets of convictions casts into the shade all the feebler repetitions of similar combinations of faith and scepticism. The half-hearted unbelievers who turn sentimental over the charms of decayed superstition, and the half-hearted believers who flirt with scepticism to prove that a life is as good as a truth, may equally derive inspiration from Pascal, but fail to equal his charm because they have not his earnestness and intellectual courage, and what we might almost call the brutal frankness of his avowals. Whatever we may think of his philosophy, every line indicates a consuming desire for a genuine standing-ground which at least commands respect.

Let us turn first to the sceptical side of Pascal. He begins the "*Pensées*" by showing us men poised between the two infinities. It is a curious proof of his power that the mathematical illustration near the beginning—the passage in which he imagines a mite, and then the smallest corpuscle in the mite's body, and then a new universe within the corpuscle, and a mite in that universe, and so forth—which, in other hands, would appear as quaint or extravagant¹—is made profoundly impressive by the throb of emotion indicated. Man, then, is a mere speck in the universe, placed between the two abysses of the infinite and of nothingness, unable to comprehend either; floating on a vast ocean, where as soon as he grasps a fact it changes and vanishes on his hands; where he burns with desire to find a firm base for a structure of belief, and where the whole foundation is always crumbling and the earth opening to the abysses. This, he says, is the misery of man; and yet the misery proves his greatness. Man is great because he knows his misery. He is a reed, the feeblest in nature; but yet he is a "thinking reed." A vapor, a drop of water might kill him; but should the whole universe crush him, he is nobler than it, for he knows that he is crushed, and the universe knows not that it

crushes. He is great as a discredited king. His present state proves his misery; but his perception that it is misery proves that he has fallen from a higher state, and suggests that that state may be restored.

Then Pascal proceeds to examine human nature, and concentrates in his maxims the pith of many students who have preached upon the text, "*Vanity of Vanities.*" The self-conceit of man; the emptiness of his aim; his heartless search for distractions; his hopeless enslavement to the illusions of the imagination; his substitution of custom for reason—all the futile speculations and windy ways of men—are described with a keen insight which reveals to us the countryman of Rochefoucauld and the student of Montaigne. The name of Montaigne is especially significant. Pascal's own experience of the actual world had been brief, though a brief experience was much to so penetrating a mind. He had been behind the scenes of ecclesiastical intrigues, and had looked on at the Fronde in France and at the Civil War in England. Politics seemed to him a vast game played for mere personal ends and decided by accident. Cromwell would have ravaged all Christendom but for a grain of sand in his passages; and, if Cleopatra's nose had been shorter the whole face of the earth would have been changed. In this sphere of meditation, however, Montaigne had been Pascal's great teacher. A conversation in which he gave his opinion of Montaigne and Epictetus is of singular significance; and many sentences of Montaigne have passed almost without alteration into his own pages. Of Montaigne, certainly one of the most delightful of all writers to the world, I need only say this: that he reveals (among other things) the impression made upon a most discursive and wayward but strangely shrewd and humorous observer by the bitter controversies and religious wars of the sixteenth century. His amazing good temper and humorous delight in conversation enables him to explore with unfailing amusement the multitudinous foibles of human nature—the ambitions, and self-seekings, and hypocrisies displayed by the actors in

¹ A curious application of the same illustration may be found in De Morgan's "*Budget of Paradoxes*," p. 321, where it is used not to depress but to exalt human intelligence, by showing how far it can push the "evaluation of π ."

the great tragi-comedy of life. The inevitable philosophical conclusion for such a man is the famous *que sais-je?* of Montaigne's motto—in other words, complete scepticism. This conclusion, too, is explicitly drawn, often in words adopted by Pascal, in Montaigne's most elaborate essay on the "Apology of Raymond de Sebonde." Here, in a comment upon a professed demonstration of natural theology, Montaigne, in his queer discursive fashion, manages to intimate his own opinion. It is, briefly, that man is but one of the animals—a doctrine confirmed, it is true, by a set of anecdotes as to elephants and dogs which would startle even the editor of the *Spectator*; that the reason of which we boast is thus little more than a blind custom, and that to suppose man capable by reason of attaining to a knowledge of the Deity is the height of absurdity. As Sir W. Hamilton did long afterwards, he quotes the Athenian inscription, "To the Unknown God," as the last word of religious philosophy. He will confute the unbeliever, he says, by trampling human pride under his feet; by making men feel their inanity and the feebleness of their reason, bow their heads and bite the earth under the authority of Divine Majesty. And of this method Pascal in the conversation expresses his cordial approval. He loves to see Montaigne humiliate the pride of reason by its own arms, and lower man's nature to the level of the beasts. Montaigne, indeed, had erred because he had stopped at this point: he had exposed the misery but not the greatness of man. How, indeed, could Montaigne go further? He is emphatically the man of this world. He has to deal with human passions as he finds them. He watches the drama as impartially as Shakespeare. He quietly puts aside conversion as impossible. He does not, as he puts it, hold with the Pythagoreans that men assume a new soul when they visit the realm of the gods. He is far more at home with Plutarch, or with his favorite Lucretius, than with Christian dogmas and traditions; and is smiling in his sleeve at the passionate eagerness of theological as well as philosophical partakers in the turmoil. To Pascal, therefore, he ex-

actly represents the natural man: the man fallen from his high estate, but—what is strange—not even conscious that he has fallen. One thing, says Pascal in his opening "Thoughts," is unintelligible to me: that is, man's indifference. It irritates me, he declares, rather than excites my pity. What! shall a man say, I know not whence I come or whither I go—whether at death I shall be annihilated or fall into the hands of an angry God; and therefore I will live without even trying to find out? The man who will risk his life and soul for some trifling point of honor will remain careless on this inconceivably important point! It must be an incomprehensible enchantment, supernatural benumbing of the faculties, which can explain such a state of mind. And yet this indifference is the meaning of Montaigne's *que sais-je?* If he thought of the angry God as a possibility, he probably comforted himself, in the words of the poet:—

He's a good fellow and 'twill all be well!

Pascal wasn't so sure of that.

Where, then, is Pascal's escape? In humiliating the intellect, has he not put out the only light, faint and flickering as it may be, that can guide us through the labyrinth? No, he says, the heart has its reasons that reason does not know. Many men have said so before and since; and it is mainly the vigor with which Pascal puts his view—the unflinching audacity with which he accepts conclusions from which others shrink—that makes his version stand out as the fullest utterance of his view. Man is, he tells us, a chimera, a monster, a contradiction. He judges all things and is a mere worm; a depository of the truth and a sink of error; at once the glory and the shame of the universe. Nature confounds the Pyrrhonists, and reason confounds the dogmatists. You must belong to one sect or the other, and yet you can remain in neither. Powerless reason, be humiliated! Imbecile nature, be silent! Hear God. To hear God is to feel the divine power. All that is good in us comes from grace. Our knowledge of God is therefore, if I may so say, a product of the reaction of the heart

moved by divine grace. It is the response of the passive spirit to the one all-powerful stimulus. That, in fact, is the true theory of every mystic, though it leads of necessity to very divergent conclusions. Pascal's conclusion is still marked by the sceptical element. He will believe, and yet Montaigne cannot be quite expelled. Montaigne, says Ste.-Beuve, is to Pascal like the fox which gnawed the vitals of the Spartan boy—a torment, yet almost a part of himself. Though a mystic, he is a mathematician, clear-headed, precise, impatient of mere vague reverie. He must have a sharp, clear-cut answer. And the result is noteworthy. The conflict expresses itself in the famous argument which may be called Pascal's wager. You declare that you know nothing, he says: let us take that ground. God is or is not; it is a question of heads or tails. On which side will you bet? The right thing, you will reply, in cases of absolute ignorance is not to bet at all. Yes, but *il faut parier*: you must bet. You are engaged in the game willy-nilly, and cannot be a mere looker-on. Now, the stakes are infinite. If you bet on God's existence and win your bet, you gain infinitely; even if you lose your bet you lose nothing. On the other side, if you bet against His existence, the stake lost may be infinite and the stake gained nothing. Can you, then, hesitate? One feels grateful to Pascal for putting so forcibly an argument which more timid theologians insinuate without daring explicitly to unfold. I must point out, however, that a curious assumption is involved. To say that eternal happiness depends on the existence of God is intelligible; but that is not the same as to say that it must depend on my belief in the existence of God. There is a chance that certain conduct may have disastrous consequences. It is just possible, however improbable, that this bit of bread may be poisoned: that is a conclusive reason for not eating it, however infinitesimal the chance may be, if I have another bit of bread which is altogether beyond suspicion. In such cases—and they are illustrated everywhere in life since we must everywhere be guided by probability—a small chance may be as un-

equivocal a reason for conduct as a complete certainty. Needless to encounter even the smallest risk of a terrible catastrophe is of course unreasonable. But though this is a sufficient ground for conduct, it is no ground at all for belief. Because there is just a chance of the catastrophe I must avoid the chance: well and good; but must I therefore believe the chance to be a certainty? That is clearly contradictory, and, indeed, the proper inference is the very reverse. To act as if a thing existed is often necessary, though its existence be highly improbable. To act, again, as if it existed is too commonly to persuade myself against reason that it does exist certainly. There are few errors which are more seductive and against which I am more bound to be on my guard. We might, therefore, reply to Pascal: If there be a slight chance of my being damned eternally for certain conduct, that is a conclusive reason for avoiding the conduct; but it is also a conclusive reason for not saying that I am certain to be damned. If the mere possibility be as decisive a guide to conduct as the calamity, that is so far a reason for not confusing chance with certainty. According to you the slightest belief is a sufficient reason. Then why try to hold an absolute belief? After all, if there be such a God as you suppose, He may choose—it is not a very wild hypothesis—to damn me for lying or deliberate self-deception. If, as we are supposing, He has not supplied me with evidence of a fact, He may be angry with me for deliberately manufacturing beliefs without evidence—for believing absolutely what I can only know to be probable; He may do so—if we may venture to attribute to Him a certain magnanimity—even if the fact considered be the fact of His existence. You contemplate a Deity who wishes to be believed at all hazards, even if He has not given reasons for belief, even therefore if the demand imply the grossest injustice. What is the chance that God, if there be a God, acts on this principle and not on the opposite principle?

Pascal, logical as he is, seems to overlook this, and for a simple reason. The commands which God is supposed to

give us on penalty of damnation are not simple commands of morality, but commands of religion: we are commanded to worship Him, love Him, and promote His glory, and we cannot do so without believing in Him. The belief, then, is not so much directly ordered as indirectly implied in the practices ordered. Thus the distinction, therefore, which I have suggested between conduct and belief, does not show itself. The heart is to obey the divine grace, and the obedience implies recognition of the source of grace. The mathematical view passes, therefore, into the mystical; and hence follows another famous conclusion. The Montaigne element makes a last rally. I am, it exclaims, a mere passive being; I am ordered to believe, but I am not free. I am so made that I cannot believe. What am I to do? Give me proofs and I may be persuaded. No, says Pascal, I cannot give you logical proofs. He has, indeed, sufficiently broken with all mathematical demonstration. Epictetus, as he remarks, falls into the opposite error to Montaigne, for Epictetus imagined that we could rise by reason to a knowledge of God. Pascal had to some degree accepted Descartes' metaphysics in scientific matters. But, as he told his sister, he could not forgive Descartes as a philosopher. Descartes had tried to do without God as far as he could, and was only forced to retain a God in order to give a fillip to set the machinery of the world in motion. Grave metaphysicians have been scandalized at this, and point out that Descartes actually invented or refurbished an argument to demonstrate the existence of God. Pascal, of course, did not explicitly deny its force. He only said that such languid arguments did not move men's hearts. It would, I fancy, be truer to say that, if conclusive, they prove the existence of a Being radically different from Pascal's. They go to prove the existence of a first cause and of the unity of the universe, and of a Being identical with the universe; but if anything they disprove the angry Deity, hating sin and punishing sinners, into whose hands Pascal feared to fall. His answer is, therefore, different. We are, said Pascal, automata, as Descartes had said, though we

are also spirits; as automata we believe by custom and instinct, and all that we can do is to accustom ourselves to submit to the right impulses. How, then, will you behave? Learn from those who have preceded you, and observe them cured of the disease from which you suffer. How is that? By acting as if they believed, he replies; by taking holy water, causing masses to be said, and so forth. "Naturellement cela vous fera croire et vous abêtera." That will make you believe, and will stupefy you. Pascal's commentators have again shrunk from this daring phrase, and tried to explain it away as a mere note to be more delicately put.¹ The crudity of the words perhaps lets out the secret. Some people seem to think that it gives the truth. Now that the danger of appealing to reason has become more marked, Pascal's remedy has become more popular; and I need hardly say that there are plenty of establishments in this neighborhood where you may try the efficacy of the Holy Water cure.

Was Pascal, then, a sceptic or a sincere believer? The answer is surely obvious. He was a sincere, a humble, and even an abject believer precisely because he was a thorough-going sceptic. One point must be touched, however, though it cannot be elaborated. The obvious objection to an appeal to the heart is that the answer is necessarily what is called subjective; is satisfactory to the believer, but to the believer alone; the "will to believe"—as Professor W. James calls it in a recent essay, where he modifies and rehabilitates Pascal's bet—implies that you believe what you will. I choose to believe this and you choose to disbelieve it. There is no reconciliation. The Hindoo fakir can persuade himself of the enmity of Vishnu as the Christian monk of the divinity of the Saviour. Holy water was used by Pagans as well as by Catholics. Pascal was partly blinded to this by the smoothness of the world in his time. He saw as a mathematician that man was between two infinities—so he made geometry sensible of the fact. But his

¹ I guess that Pascal was thinking of Montaigne, who, in the essay upon Raymond de Sebonde, says, speaking of the evil of excessive sensibility, "Il nous faut abestir pour nous assagir."

tory still accounts six thousand years. The Catholic Church could still represent itself to the historian as the central phenomenon of all human history, not as an Institution which dates from a geological yesterday, and peculiar to a special group of nations which forms but a minute minority of the race. Faith in God could therefore be identified with faith in the Church, and a little factor in a vast evolution as equivalent to the whole. The historical argument to which he proceeds is therefore only remarkable for naïveté. "Those," he says, "who saw Lamech, who saw Adam, also saw Jacob, who saw those who saw Moses. Therefore the deluge and the creation are true." Who will answer for them? To prove anything, that is, you have only to invent evidence as well as to invent facts. That is not Pascal's strong point, and is worthy only of a man who could believe in the Holy Thorn.

The great Pascal, however, remains. This much I will venture to say. The root of all Pascal's creed, if I have judged rightly, is that primary doctrine: Man is corrupt, and all good is due to the inspiration of God. I think, therefore I am, says Descartes; I tremble, therefore God is, adds Pascal. His creed is made of feeling as well as of logic. That gives scepticism on one side and faith on the other. I can believe nothing of myself because I am naturally imbecile. I can accept any belief unhesitatingly, because I am conscious of the power which moves my heart. The belief may be intellectually absurd. The doctrine of inherited guilt is monstrous, says Pascal; can a child be damned for an action committed six thousand years before its birth? Nothing, he admits, so shocking; and yet, he adds, it is essential to understanding man. It is simply one aspect of that profound antinomy from which we start. Is there, then, any such antinomy? Is human nature absolutely corrupt? Divines calmly tell us that it is a fact. Doubtless it is a fact, if you mean that men have bad impulses, and if you further declare all good influences come from a supernatural source. But why

should I? Why interpret man and the world as the meeting-place of these tremendous contradictions? Why divide a single though exceeding complex process into a battle-ground between two wholly opposed forces? I confess that I should correct Montaigne, so far as he needs correction, by allowing more liberally for the nobler impulses of human nature—not by stripping man of all virtue and handing over the good to an inconceivable and inscrutable force. If you once begin by introducing an omnipotent struggling with a finite being, this may be the logical result; but I do not see my way to the first step. Meanwhile, I do see some painful results. I see that Pascal's morality becomes distorted; that in the division between grace and nature some innocent and some admirable qualities have got to the wrong side; that Pascal becomes a morbid ascetic, torturing himself to death, hating innocent diversion because it has the great merit of distracting the mind from melancholy brooding, looking upon natural passions as simply bad, and inculcating demeanor which would turn us all into celibate monks; pushing delicacy to the point at which it becomes confounded with pruriency; distrusting even the highest of blessings, love of sisters and friends, because they take us away from the service of the Being who, after all, does not require our services; consecrating poverty instead of trying to suppress it; and finally, renouncing the intellectual pursuits for which he had the most astonishing fitness, because geometry had no bearing on dogmatic theology. The devotion of a man to an ideal which, however imperfect, is neither base, sensual, nor antisocial, which implies a passionate devotion to some of the higher impulses of our nature, has so great a claim upon our reverence that we can forgive, and even love, Pascal. We cannot follow him without treason to our highest interests.

The point of view from which Pascal repels us is indicated in the common-sense comments upon the "*Pensées*" by Voltaire and Condorcet. We decline to stupefy ourselves. Drug yourself with holy water and masses, or be a brute beast. We reply as the old Duchess of

Marlborough replied to her doctor's statement that she must be blistered or die. "I won't be blistered, and I won't die!" We won't be drugged and we won't be brute beasts. And to Pascal's appeal from the reason to the heart, we answer that it implies a fundamental error. The "heart" is not another kind of reason—a co-ordinate faculty for discerning truth—but a name for emotions which are not reason at all. Least of all can it claim to pronounce that certain elements in our life are supernatural or intrusions from without. And yet the heart, if we are to use the word, implies something that we must take into account. It represents implicit judgments, for it determines the relative values of different passions and aims, and therefore does in fact supply principles which regulate our lives. Pascal's heart, for example, meant a conviction founded upon his own direct experience of the infinite superiority of the spiritual, as he would have said, to the temporal and sensual. Such implicit judgments and the morality in which they are embodied are modified more or less directly by the adoption of new philosophical or scientific beliefs. We do not fear for a moment that in seeking for truth and applying the most rigid logical tests, we are really endangering whatever is really sound in the judgments or valuable in the morality. A coherent and reliable philosophy would, we are fully assured, incorporate whatever may be sound in the beliefs and feelings which are instinctive rather than reasoned. But the possibility, or rather the certainty, or such a conflict imposes a responsibility upon his opponents. For, in the first place, it explains why persuasion does not go with conviction or exposure or fallacy lead to adoption of the truth. The clearest exposition of the logical error may only lead, as it led Pascal, to a revolt against reason; and the blind instinct will somehow assert itself as a matter of fact, and be an irreconcilable element until a satisfaction be provided for it in a more comprehensive and rational construction. Nor is the instinct, blind though it be, without its light. Its very existence affords a presumption, not that it is true, but that it is an

imperfect effort to impress a truth. And this is in fact the reason which is impressed upon us most forcibly by such a man as Pascal. He is himself, as he declared man to be in general, a kind of incarnate antinomy. As he brings the heart into hopeless conflict with reason; as he manages at once to exaggerate the baseness and the grandeur of human nature; as he urges alternately with extraordinary keenness two aspects of truth, and is forced to make them contradictory instead of complementary; as his moral position is on one side pure, elevating, and a standing rebuke to all the meaner tendencies of his generation, and yet, on the other, becomes morbid, perverse, and impracticable, because he has separated life into its incommensurable elements—he leaves to us not a final solution but a problem: How to form a system which shall throughout be reasonable and founded upon fact, and yet find due place and judicious guidance for the higher elements, which he has really perverted in the effort to exaggerate their importance.

LESLIE STEPHEN.

From Blackwood's Magazine.
THAKUR PERTAB SINGH: A TALE
OF AN INDIAN FAMINE.

PART II.

THE DESERTED VILLAGE.

Gardanpur is now like a city of the dead. Pertab Singh and his son seldom leave the house. What is to take them abroad? Bullub Dass keeps within doors also. He and Bansi are strengthening their defences as well as they can, and hiding away everything that can be hidden. The old watchman is the only active inhabitant. He goes his rounds regularly, and makes his reports to Pertab Singh and to the police station. He has unearthed some wretched sick and old people who were left behind by the weavers and the low-castes when they fled. One poor creature he found dead in one of the outlying huts, a mere skeleton of a man. Life had been ex-

530 *Thakur Pertáb Singh: A Tale of an Indian Famine.*

tinged some time before he was discovered, and the starving dogs had been gnawing at the dry mummy of a corpse and had been disappointed. The watchman reported the matter to the police, who came, held an inquest, recorded a finding, and had the body burnt. Other poor creatures whom he found starving but still alive he brought to the Rajput, who put them into one of the deserted houses and gave them a daily dole of food—a work of charity in which, I am bound to say, Bullub Dass took his full share. From many of the villages round about the same story of starvation and death is heard, the watchman says, when he comes back from the police station.

Things went on in this way for some weeks. The Rajput's store of grain had been replenished from the nearest market. One of the widows had been sent off to her own people, who lived within a week's journey; and most of the poor relations, finding their quarters not so pleasant and their fare less abundant, had transferred their affections and their company to others of their kindred who lived in a more prosperous country, where they hoped to have a better time. There was enough to keep the diminished household for six or seven months. Pertáb Singh and his son made one or two journeys to the revenue headquarters of their district to press their claim to remission and to find out what was doing or going to be done. And so the cold season passed away and no rain fell.

It is the hot weather again now. The wind howls and scorches as we have known it before. The earth longs vainly, like the tongue of Dives, for a cool drop of water to assuage its agony. The burning rays of the sun are thrown back fiercely from the hardened surface of the ground, which never cools down now by night or day, and the dust rises in clouds which would obscure an army. It matters little to Gardanpur. The watchman is the only human being who goes much abroad. He tells Pertáb Singh that in all his life, and he is over sixty, he has not known the *loo* (hot wind) to rage as

it rages this year. He seldom meets a soul on his long walk from the village to the police station—that is, between dawn and noon. Once or twice he has found the bodies of travellers lying as they fell in their tracks, killed by the hot wind. They were like dry leaves; not even a jackal or a vulture had cared to touch them. One, by the way, was the old Brahmin priest Tulsi from Prág, who was making his rounds as usual, in spite of drought and famine, to gather in his dues. He had his big register of the names of his clients under his arm, and gripped it even in death.

The Banker is robbed.

The nights are if possible hotter than the days. The earth, which has suffered all day from the smiting heat of the sun, tries to revenge itself by returning the heat with interest at night. Sleep indoors is impossible, or if possible, it would mean death. Pertáb Singh and his son and the two servants that are left pull their beds out into the courtyard and sleep there. They lie coiled up on their short cots, and even in this heat they are wrapped up heads and all in coarse cotton sheets to keep the evil spirits from their ears and mouth. That is the old man's bed with the lacquered legs in the middle of the yard, and the son's is nearest to him. The two servants lie between them and the entrance, on rude wooden cots with bottoms of coarse string. Hark! what is that? The old man, who is lightest in his sleep, is sitting up. Surely he heard a gun. Yes, that is another, and not far off too. And now he sees the top branches of the great tree that stands in the yard and overshadows the house, lit up by the glare of fire. Hark! there is another shot, and it is answered by defiant shouts. They are all awake now and up. There is no need to dress. Except that they have taken off their jackets, they are ready for work. Their shoes, if they need them, lie beside their cots, and can be shuffled on in a second without stooping even. "It is Bullub Dass," said Pertáb Singh briefly. "They have

come to loot him. Go, Ram Pershad, and see what it is," he said to one of the men, and sat himself down calmly on the bed again with a yawn. "It is not our business anyhow." It was plain he had not much intention of helping Bullub Dass. Experienced in village life, and wary as a fox, was Pertab Singh. He knew it was not a safe thing to be too zealous or ready to interfere when work of this kind was going on. You go to help the victim and you are accused of the crime. The evil look in Bullub Dass's eye when they last spoke together came to his mind, and he thought the cunning banker was not likely to neglect a good chance of ruining him. A robbery or a murder is to the wise man an opportunity of paying off old scores. So he shows no haste to move, although he can now recognize Bullub Dass's voice calling for help, and the assailants are evidently trying to batter in the strong door of the banker's house.

Here is Ram Pershad back again. He crept round in the shadow of the wall until he got a good view of what was going on. There were a score of men attacking Bullub Dass's house. He only saw five or six, but he was sure there must be twenty at least. Two held big flaring torches while the others were hammering at the door. A small urchin carried an oil-jar and fed the torches. No, they have no guns. Bullub or Bansil must have fired from the upper window whence the cries for help came. But they are too frightened to look out to take aim. They all grow merry over this picture. The baiting of a banker in his own house was as good sport to them as an otter-hunt to a Devonshire farmer. "Off with you again," said Pertab, "and bring us word how the business goes on." Ram Pershad slips out again, closing the door behind him. Before he has time to return there is a knocking at the gate, and a voice, which they recognize as the old watchman's, calls to the Rajput. "Come out, sir," he says, "with your men and help me to save Bullub Dass; they are looting him, and will set fire to his house."

"Why should we go?" the Rajput answers. "We are not the police. He will say I did it. Why should we save him? The bloodsucker, he wouldn't help us though his pits are full of grain and his boxes of money."

"Very well, sir, I will go alone, old man that I am."

Pertab Singh relents. He and his son seize their swords and follow the watchman as fast as they can. After all, a fight is a fight whatever the cause, and the blood runs hot in a Rajput's veins. The watchman has a twenty yards' start of them. Just as they sight the banker's house they see him rush at the men who are battering the door, whirling with both hands his long iron-bound and brass-tipped bamboo. Down goes the nearest ruffian with a blow that will prevent him from giving trouble for some time to come at least. Taken unawares, the assailants falter, the Rajputs rush on with a cry, brandishing their swords. The younger receives a thrust from a torch in the face that singes his beard and blinds him with smoke. In a second the lights are thrown down, and the rest of the band are in swift retreat down the lane. Hitherto Bullub Dass has not dared to look out from his upper window. But, hearing the watchman's cry of victory as the robbers bolt, he plucks up courage and fires down into the lane, scattering the slugs all about Pertab Singh, narrowly missing him, and causing him to use very violent language reflecting on the virtue of the banker's female relations. Now, Bullub Dass and his factotum descend slowly by the narrow winding stair, and after many assurances that the enemy has fled and that there is no sort of danger have been exacted, the bolts are slowly removed and the big door is opened. "You're a better shot with a writ than a musket, Seth Sahib," says the young Rajput, who cannot lose a chance of annoying the banker. "You will no doubt give the watchman a handsome reward for saving you." Bullub Dass did not reply. He was eager to make certain that everything was safe, and snatching up

532 *Thakur Pertáb Singh: A Tale of an Indian Famine.*

a rude lamp, a stick with a small wooden cup at the end, holding oil and a wick, he called Bansi Lall, and went off to the back part of his house where he kept his valuables.

He had hardly disappeared before a cry of rage and despair startled the men at the door. They hurried after him, and found the banker and Bansi standing aghast before a couple of chests that had been broken open and rifled. The place is a small inner chamber without windows, but communicating with a room the wall of which is the outside wall of the house. Running into this room, the watchman finds that a hole has been made into it from the outside; and looking out, he sees a man just setting a light to a heap of something in the open space behind the house. Before he can move, a fierce flame bursts out, and shows him three or four men making their escape down the lane at the back of Bullub Dass's house. He calls for help, and getting through the opening as quickly as he can, gives chase. But he is old and stiff, and the thieves are nimble. He has no chance, and after a hundred yards he is dead-beat and turns back. There is a regular bonfire blazing now behind the house, and he hurries back to see what can be done. They have all gathered in the open space round the fire, all except Bullub Dass, who has collapsed before his empty boxes, and is crying like a child over a broken toy. Bansi makes a rush at the fire and tries to pull out some of the flaming papers, but with little result except burns to himself. Everything is as dry as tinder. There is a lot of litter in the yard, and the fire takes it as if it were gunpowder, and flies along the ground into an empty bullock-shed, a lean-to against the house. The shed is in a blaze almost instantaneously, and the neighboring house, which is low and has a good deal of wood in it, is certain to burn too.

It is evident now that the attack on the door was only a feint, and meant to draw off attention from the real business which was going on behind. The robbers had secured all Bullub

Dass's loose cash, and his account-books and securities fed the fire. It was certainly a heavy blow, but the granaries were safe. They had not time to rifle them—a fortunate matter for the village as well as for the owner. For who else would advance the seed for the next harvest? The only thing to do now was to prevent the fire spreading, and to this the watchman and Pertáb's party bent all their energies. Bullub Dass and Bansi do not make even a show of helping, and nobody seems to expect it of them. You do not go to a *bania* for work of this kind.

The Wandering of the Exiles.

And now let us leave Pertáb Singh and the village and go after the people in their exodus. It was a weary march in the dust and heat; the bullocks and cattle could not travel more than two miles an hour, but they plodded on steadfastly and patiently. The wanderers speak little to each other; occasionally the voice of a driver is heard calling to his beast, the wail of a cross or ailing child, and the mother's voice chiding or soothing it. Creak, creak, creak go the wheels. At noon they have covered ten or twelve miles, and they have reached a mango-grove with a big well in it. A halt is called, the oxen unyoked and turned to graze, the people get out of the carts, and each little group clears a cooking-place and prepares the midday meal. The bigger children scatter through the grove to collect sticks for the fire, while the old people and the unoccupied lie down on the ground and sleep. The Indian peasant can always sleep. Some of them perchance dream of happier encampments on the way to the shrines of Hurdwar or Prág, when the women wore their holiday garb, and the children were fat and merry, and the cattle well fed and sleek, and the groups of pilgrims under the shade of the mango-trees were full of contented and cheerful life.

But the march begins again after an hour or two's rest, and the weary progress continues until the sun has set

and the stars shine out. Then, when a convenient place is found, they halt again and arrange themselves for the night. It is getting cold now, and towards morning those who are short of clothing find it hard to sleep, and huddle around such a half-hearted fire as a little straw and a few sticks can afford. Several days pass in this fashion. The country is as monotonous as the dry dust and the hot sun. They have crossed the Jumna, over a bridge of boats and through the miles of soft sand on either bank. The exhausted beasts can hardly drag the heavy carts through it. They are now in Bundelcund, where the famine is more severe. The heavy black clay soil is hard and lumpy, villages are far apart, and even with money in their hands the exiles can hardly get corn to buy. They have left the metalled road now, and are making eastwards by an ordinary country track. Some of the cattle are beginning to give in, and some of the women also are worn out and ill. They hasten on, death goading them, frantic and eager to get to the promised land of plenty. Surely it cannot be so far off. Now rain falls, useless to provide food, but fraught with fresh misery to those poor wanderers. The road, bad enough before, becomes well-nigh impassable. Hitherto they have kept together well, and have done their best to help each other. But misery unspeakable and the fear of death are making them selfish, and the one thought in each mind is to press on—on—on.

Two carts have fallen out. Their teams cannot go a step farther. There is nothing for it but to stop and halt till they recover their strength a little. As soon as they are unyoked, one of the poor beasts lays him down quietly to die. He has worked honestly, and done his duty to the last. The others hobble off the road stiffly and feebly, and strive to find some remnant of scant pasturage in the barren fields. There are two families. One a man of about five-and-twenty, a Brahmin, Sri Kishun by name, with his wife, somewhat younger, and two children, a girl

and a boy. The boy is the younger, and must be two years old, yet the woman is nursing him. She looks half starved herself; the child is fairly nourished still. It is a boy, and she will save him if she can, that her husband may not perish in hell for dying sonless. The little girl, a pretty bright-eyed thing, but showing evident signs of want—well, she is only a girl, a thing of not much account. She is trying to stay the pangs of hunger with a little parched rice which her father shares with her. It is one of their oxen that has died. What is to be done? The remaining beast is good enough, but he cannot pull the cart by himself. There is a big village away there in the distance, over a mile off. The woman suggests that the bullock should be taken there and sold to relieve their immediate wants, and the cart too, if any one will buy it, and that they should try to struggle on after the rest. The man was for finding their way back to their own village. Better to die there, he said, than in the jungle. But his wife thought their best chance was to go on. "Was not the land of promise near at hand? In their own home they knew there was no hope." So reluctantly he drives off the bullock to the village, while the woman and the children, having eaten what there was to eat, lie down where they are, and sleep the sleep of exhaustion.

About an hour had passed before he returns. The girl has awakened, and is crying with hunger; the woman and the baby are still asleep. He has a little of the parched rice still left, which he gives to his daughter, and he has brought some water from the village, a drink of which refreshes her. Then he awakens his wife and tells her they must be up and moving while yet they have strength left. He has obtained three rupees for the bullock—about a tenth of its value—but he could get no food. There was no shop in the village, and the people said they had nothing left for themselves. They were a rough set of Bundélas, and looked on him as a foreigner. Anyhow, they either would not or could

not help him. He sat down to rest while he is telling her this. There is nothing for it but to go on. The other cart which fell out has yoked up and gone about half an hour ago. They may be able to overtake it, at any rate, when it halts for the night. It will be better to be with friends, who, although they have no food to spare, may be able to give the child or the woman a lift occasionally. So they rise slowly and painfully. The man makes a bundle of a few spare clothes, a brass drinking-vessel and a cooking-pan, and a few lighter articles, and balances it on his head. The cart and the heavier things in it they must abandon. The woman puts the boy astride on her hip, and they walk away in single file—the man leading and the girl last. The worn, attenuated forms do not look as if they could go far. But there is in them a wonderful hereditary patience and endurance which will carry them a long way.

The aspect of the country has been changing of late. It is much wilder. Here and there patches of stunted forest; and low rugged ridges of black rock cropping up from the earth in a mysterious way block the road and force it to take a winding course. Villages seem very few and far between; and travellers, there is hardly one. It seems a mournful and haunted country to these poor wanderers. Oftentimes they felt as if they must lie down and give up the struggle for life. The little girl was walling in a low tone as she shuffled rather than walked along. The man carried her a little now and then, but even her feather-weight was too much for him. The woman showed more strength. Was it the thought of the man-child that she bore and was trying to save that gave it to her? It was night now, and the wind came cold and chill from the patches of jungle they passed through. Occasionally some wild thing with a rustle and a rush crossed the path with a bound, and once or twice the woman quickened her steps as she thought she heard the stealthy foot of a beast of prey in the brushwood alongside the

path. At last there is a light to be seen that inspires them with hope. Yes, it is the flicker of a fire under some trees on ahead. The reviving spirit gives new life to the falling pulse and wearied sinews. They will at least reach that light. If there is no succor there, they must die. On they plot in the same melancholy single file. The boy's head nods to his mother's step as if the slender neck would break. The man tramps on with the tramp of despair, and the little girl, her lower jaw falling already with the awful look of famine, which once seen is never forgotten, stumbles on behind. Will she be able to go much farther?

At length—ah me, what an infinite distance seems that last mile!—they reach the trees under which is the light. Thank God! It is their friends with the cart. They have been there some time. The cooking-place has been cleared and the fire lighted, and they have a scanty supply of flour which has been made into cakes.

The new-comers are too far gone to speak. They collapse rather than sit down near the group by the fire. The little girl can only point to her mouth and gasp for food. It is a party something like their own; the children are older, and there are an old man and woman, the grandpeople. They too are very hungry, they too have hardly anything to eat, but of that little they give. The girl seizes eagerly the piece of bread offered to her. She puts a bit in her mouth and tries to eat it, but nature is too weak and the power of restoration has gone. She lies down with a sigh and a low moan, still chewing the tough leathery cake. Even the feel of food between her teeth is a comfort, and so she goes to sleep.

The Flight from Death.

In the morning they are up at dawn and begin once more the flight from death. But the girl-child's troubles are ended, and they leave her there as she fell asleep. Let us also leave her to the care of Him who said that of such was the kingdom of heaven. Bitter grief will come perhaps to the

father and mother afterwards, if they live. At the present time, want, fatigue, misery, and the consuming desire to save the life of the male child, stifle sorrow. It is a large grove of mahwa-trees, that in which they spent the night. There are big groves of mangoes in their own country, but nothing like this mahwa-grove, which is almost a small forest, covering several miles. Ah! if it were the season for the mahwa-flower there would be no want of sweet nourishing food for them all. There has been rain here evidently not long ago, for the grass is fresh and green, and the bullocks have been able to pick up a meal. The good beasts show more life than they have shown for days.

The fugitives believe they are on the road taken by their own people. The little Bundelcund carts do not make such broad ruts, and certainly these tracks were not made by the hoofs of the undersized cattle of these parts. But there may be other wanderers from the famine land. They have heard, in truth, that many people from their own country have been seen making for Malwa. Far on in the day they find a dead ox lying by the roadside. He is worn to skin and bone, but they recognize it as belonging to a farmer of their village. Even if they had no other sign to know it by, there was its peculiar twisted horn. Towards evening, as they are going very slowly through a patch of *sál*-jungle, they come across another, and a sadder, proof that they are on the trail of their own people. A woman is lying by the roadside, her head resting on her poor thin arm. She is dead. She is the widowed sister of Kali Churn, the washerman of Gardanpur. They cannot touch her to see if she has been dead long, for they are men of high caste. The shadow of misery and death has come very near to them now. When will they reach this promised land of plenty?

It is the second day. The small store of grain is well-nigh gone, and their friends can no longer afford to give to Sri Kishun and his wife. Sri

Kishun has the money he got for his ox, but hitherto he has not been able to find any food to buy. The country they have traversed has been wild and uninhabited, and they have had to cross some ghats or passes, low enough, but very stony and rough, and trying to men and cattle in so weak a state. The mother and her baby are in the cart, and she has killed herself in her loving attempts to nourish the child, which now wails unceasingly with the low moan of suffering infancy. What is to be done? When they halt at mid-day, Sri Kishun, weak as he is, makes a last effort to obtain food. She urges him to get a goat for the child if he can—a milch goat might still save their boy. As for herself, she is too weak now to nurse him even if she could get food. So off he goes with tottering, stumbling steps to the village, a small wild-looking collection of tiled huts a mile from their resting-place. Fortune befriends him. It is a village of shepherds, and they are willing to sell him a goat for something less than the sum he can give. But the flock is away in the jungle, very far off, and will not return till evening. His head reels with the weakness of hunger and the misery of despair. He entreats and beseeches and kneels to them, Brahmin as he is, but to no purpose. The men are not cruel, but they are as emotionless and as stupid as the flocks they tend. No, they will not bring the goat to the halting-place. How do they know where it is or whether he will remain there? He must wait for it if he wants it. His poor confused brain thinks for a moment of the child and his wife, but only for a moment. The only thought it can retain is of his own weakness and inability to move. He asks for a little food and water, and they give him some parched grain and point him to a well. He has his brass vessel with him. The food and drink give him at least strength to rest and sleep.

The sun is low when they rouse him to take the goat. They have dealt with him honestly enough, and she is a good goat in full milk. He is

stronger now, and not so long getting back, even though he has to lead and pull the animal on sometimes by the cloth which he has twisted round her neck. There is a movement going on in the camp, and he hears the death-wall raised by the women. He hurries on as fast as he can; maybe he is too late. The women are gathered round some one on the ground. They make way for him as he comes, and he sees his wife lying—there is no need for him to ask. She is dead. She has just fallen back where she was sitting with the child in her arms, and her black eyes, not yet glazed by death, looking so large in the thin famine-stricken face, seem to implore his help. Was he able to save his child? With the help of the women and the goat he does what a man can. Let us hope that the boy lived, and that the mother did not give her life in vain. As for Sri Kishun, this new loss struck him even through the depth of his misery. After all, you will say, he is only one among hundreds who are suffering from the same cruel fate. But he was not educated enough to think of this, or philosopher enough to enjoy the consolation that such a thought brings to our curiously selfish natures.

A better Country.

Meanwhile the main body of wanderers in whose tracks Sri Kishun and his friends are tolling have reached a better country—not indeed the Malwa of promise, but a land where there have been more plenteous rains and a more abundant harvest. There is food to buy, although it is dear. Large tracts of forest are frequent, even near to the highroad, and the cattle can find sufficient fodder. They have lost several stragglers, like Sri Kishun and his friends, during the march, but still the great body of them has held together, and there is a long procession of carts and cattle when they move. It is evening, and they have made a march of many miles to-day. The road has led down through some thick teak forest to the bed of a river. It is not a wide-spreading sheet of turbid water, such

as they know in their own country, with broad stretches of sand on either side, but a clear sparkling stream on a rocky bed, with high wood-clad banks that do not shift with each year's floods. It is a grateful sight to men and cattle after a hot and dusty day. The stream is low, and they see some men walking across with the water not much above the knee. So they cross to the far side, letting the oxen and the other cattle drink their fill as they go. The ground slopes gently on the other side and opens out into a green glade between the water and the forest. Here they unyoke and make preparations to spend the night. There is a temple on the high bank where the road enters the forest, and the thick stone battlemented walls and great flanking towers of some old-world fortress stand out here and there amongst the trees. It is a beautiful place, but a famishing man has no eye for the picturesque. Nevertheless, a more cheerful feeling prevails in the camp, and it seems to them as if the bitterness of death has passed.

Some of the more energetic men in whom a little remnant of life and spirit is left make their way up to the temple and talk to the old Hindu ascetic who dwells there. He tells them that the next march will take them into a country where grain is fairly plentiful and pasturage good. They are disappointed to find that it is not the place of plenty and low prices of which they had heard. "No," he says, "that was so a long time ago, no doubt. He has heard old men speak regretfully of the time when wheat sold eighty pounds for the rupee, and every little landowner could keep his elephant. Things have changed since then. The merchants come round and buy up the wheat to send it to the railroad, which they say is fifty miles off. The farmers are much richer than they used to be. Why, thirty years ago you hardly saw a bit of silver in these parts. They are good people too," he adds, "and there is no want of food for the old Brahmin priest." This news, which they carry down to the camp,

and a refreshing wash in the river, where all except the sick and very old have bathed, give new life to the exiles, and they start in the morning with fresh vigor. The old priest spake truly. Every mile they made now brought them into a better country. The millet-stalks stood high and thick in the fields. The bunches of grain had been gathered long since, but there had been no time or need yet to cut and stack the stalks. They might take what they liked for the cattle, even without the ceremony of asking. The rice-stubble showed that there had been a good crop, and the young wheat and grain were coming up green and strong in the rich red soil. In the villages they found purchasers for such beasts as they could spare, at low prices certainly, but that was to be expected. Food was easily to be had and fairly cheap, and now and again rich men in the villages gave them a measure or two of grain.

They began now to break up into smaller parties and disperse among the villages within three or four miles of the road. Some of the village artisans found work to do in their own calling; of the rest, some had a little money, others had cattle which they could sell, and they calculated that they had enough to keep them from starvation until in two or three months the wheat and barley harvests should be ready and their labor should be in demand. Meanwhile in some places there was money to be earned by cotton-picking, as the cotton-pods were now bursting. Some, however, were absolutely destitute, and these wandered from village to village, begging their bread, for all pride of caste or position had now gone, sometimes abandoning their starving children, more often lying down by the roadside to die with them. The villagers were very good to these poor famished strangers, who now suffered from cold as well as hunger. The nights are cold and frosty at this season, especially in the low ground, and their clothes are mere rags hardly covering their nakedness. Some of the richer men are giving daily doles of

food, and in the bigger villages huts have been set aside where the wanderers can be sheltered and fed.

In one village lives an old woman whom the people, in the quaint way in which they transpose the syllables of our English names, call Lony Ochter Mém Sahib. She was the daughter of a high-caste Hindoo, and is the owner of the land, and a great person among her simple neighbors. A very old woman, a relic of the old time, she had been the wife of an English officer when such connections brought no shame. She remembers how in the great famine, while she was still a girl, her "Sahib," Captain Ochterlony, had sheltered many of the orphan children, and she had helped him to care for and feed them. Partly in memory of him, and partly of her own goodness, she opens her doors to the starving people who come to the village, and offers to keep their babies and children while they look for work; and many little things who would have perished by the roadside owe their lives to the kind charity of the Thakur lady, Lony Ochter Mém Sahib. Some are taken away by their parents when better times return, and others remain with her as long as she lives.

The Exiles Return.

It is the hot weather again, the seasons have run their course, and it is nearly the same time of the year as that in which we first made acquaintance with Gardanpur. But the rains have come early this year. The plain is green and moist, and the ploughs are at work. It is strange how quickly after the first fall of rain the survivors of the exiles have found their way back. Not as they went, with carts and cattle in one long procession, but straggling back by families or by twos and threes, or sometimes a man or a woman all alone, the only one left out of a family that fled last year—back again to their old homes in their old village, glad to see their old chief and to begin afresh at the old toll. Oxen had to be bought and carts and ploughs, and grain for seed had to be

obtained until the earth should yield her increase once more. The money for cattle and implements was lent without interest to Pertáb Singh by the government, while Bullub Dass the much-abused advanced the seed. His books and his papers had all been burnt, and he was afraid sometimes that the people would repudiate their debts. As each farmer comes for his seed, a little preliminary business is transacted between him and the banker. There is no attempt on the part of the debtor, who knows pretty well how much money he has had, to deny his obligation. But as to the interest account, there is much dispute and sometimes warm words. The village accountant and four or five of the more substantial men are called in to arbitrate, and a settlement fair enough for both sides is made and recorded and signed. An Indian peasant is very honest among men. He regards the seed as a first charge on his crop, and the rent or revenue, in principle they are the same, as the second. No doubt it is his interest to be honest in such matters. When we are honest it is not our best policy, and do we regard ourselves as the less virtuous and praiseworthy on that account?

And so the village is once more full of active life, and the Rajput Pertáb Singh is happy again. His womenfolk and grandchildren have come back to him. The mortgage interest has been regularly paid. The government has been kind to him in the matter of revenue. All arrears have been remitted, and a reduction has been made for some time to come, until the level of prosperity shall be restored, and the many empty huts, which are now, in Eastern phrase, "without a lamp," shall be occupied once more.

In due time the old man is gathered to his fathers. The Risaldar Sahib, who has retired from the army and taken his pension, sits in his place. He has seen hard fighting in these latter days, and has come through the war with a great name, and with rewards which enable him to pay off the hateful mortgage and to walk the

earth the proudest of men, a Rajput soldier on his own soil and free of debt. When you go to Gardanpur he will come out in his neat white *mufti*, his broad breast covered with medals and orders. He will invite you to his house and offer you fresh milk and sweetmeats. He knows your English tastes too well to think that you care much for such things. But such as he has, he sets before you. As you sit with him in a verandah on one side of the courtyard, he will tell you, if you ask him, of the wars he has been in and of the Sahibs he has known, and of the many deeds of prowess he has seen. If you leave him to himself, he will prefer to talk of the great famine of 18—, and of the way in which his old father came through it.

THE SEQUEL.

An old woman is sitting on one of the highest of the sand-hillocks in the east of Gardanpur. From her looks she may be sixty, but women age quickly in the East, and perhaps she is only fifty years old. Her hair is white and scanty, and hangs limp, in thin uneven locks, to her shrivelled shoulders. There is a regularity and refinement in the features which tell of high blood and pride of caste. Years and sorrows have scored her face with deep lines. The large black eyes have grown dull and dim with time. Her coarse sheet or veil has fallen back from her head, showing an old worn bodice of blue stuff and a petticoat of similar material, of which the color is no longer distinguishable. Her bare withered arms are outstretched, the elbows resting on her knees and the hands hanging listlessly from the wrists. A net of coarse string and a small hoe for scraping up grass lie at her feet, and show the purpose that has called her afield. The light of dawn is in the east, and the moon is just sinking below the opposite horizon. She is gazing with wistful eyes into the far-off western distance, as one sitting on a rock by the shore gazes over the sea searching for the cause of all things; and as she

looks she weeps passionately, and the tears make furrows on her poor uncared-for cheeks.

There is a man, a village servant of low caste, standing not far off. He notices her distress, and draws near to speak to her. "Yes, she is weeping. How can she help weeping since she is alone, altogether alone, in the world? She lost her son and her husband in the great famine, and one, only one, remained to her, her grandson, whose mother also died in the famine when they all fled from Gardanpur westward. And yesterday, only yesterday, when he was just eighteen, the lad fell ill and died. She is alone now, and without hope for this world or the world after death." What more is there for such a one to lose, or what deeper draught of misery to drain? She throws herself moaning on the ground. Moved by pity, or thinking that she has fallen from faintness, the man steps forward and stoops to raise her up. "Away!" she cries; "do not touch me, come not near me, I am a Brahmin, a Brahmin woman, a Brahmin!"

Poor, old, miserable, and deserted as she is, she has still a precious jewel to keep or to lose. It is her caste.

SIR C. H. T. CROSTHWAITE, K.C.S.I.

From *Leisure Hour*.

THE SPHINX OF MODERN LONDON.

Modern London exerts an irresistible fascination, which grows with its growth; it is a profound mystery which analysis greatly intensifies. Seventy years ago Heinrich Heine could write, "I have seen the greatest wonder which the world can show to the astonished spirit; I have seen it, and am more astonished than ever—and still there remains fixed in my memory that stone forest of houses, and, amid them, the rushing stream of faces, of living human faces, with all their motley passions, all their terrible impulses of love, of hunger, and of hate—I am speaking of London." Heine goes on to refer to

the prevalent comfort in the great city, "while crammed away in retired lanes and dark damp alleys poverty dwells with her rags and her tears." Mr. Charles Booth,¹ after ten years' laborious investigations into the condition of the people of the Metropolis, arrives at conclusions not wholly dissimilar; he, like Heine, stands and watches the stream of living beings pass by, and finds in this an inspiring sight, not the least so in the main streets of the poorest districts. In the last and most interesting chapter of the volume just issued he records the impressions made on him by the panorama of the street and the bustle of the crowd. "Men, women, and children, all or nearly all, are keenly pursuing some aim; so much so, that the few of whom this is not true attract much attention and often become subjects of suspicion. Nearly all are well dressed and look well fed. Ragged clothes or hungry faces catch the eye when they occur. In quiet streets where there is neither crowd nor bustle it is the same; the passers-by are going about their business and seldom seem to call for pity on account of poverty. We thus have the general impression of a well-to-do energetic people, and this impression is borne out by all the facts and every test that can be applied; but is subject, just as they are, to exceptions, and in about the same degree. Here and there, as one walks, a foul back street is seen, or some woe-begone figure slips past. We may then turn to our statistics to learn what proportion such things bear to the rest, and be satisfied that the proportion is on the whole no greater than is indicated by the panorama of the street." With such an unexpectedly favorable verdict does this prince of statisticians close his survey of London as it is. In three more years, and in as many volumes, he hopes to review and discuss the remedial agencies at work, and to enter more fully into many matters which tend to the progress of the people.

Very significant is the marked hopefulness of tone which pervades this volume: the cynical despair of some

¹ "Life and Labor of the People in London," edited by Charles Booth. Vol. IX. Macmillan & Co., 1907.

writers, and the gloomy apprehensions of many earnest reformers, are conspicuous by their absence; the protracted investigations which have been made have revealed greater elasticity of adaptation than any theories might suggest. When we have made full allowance for the crest of the wave of industrial prosperity on which we are riding, it is clear that there are many signs of a permanently quickened vitality in the world of labor. Mr. Booth has found a brightness and vivacity in the lives of the poor which few who have not lived among them would believe possible; he has come to recognize, what ten years' continuous intercourse with the poorest in one district of East London impressed upon ourselves, that there is a buoyancy of spirit which is childlike in its influence, and leads to the full enjoyment of the present without irksome care for the future. Mr. Ernest Aves, whose experience in Toynbee Hall has given him similar opportunities of investigation, contributes several chapters in this volume; when discussing the irregularity of earnings, the uncertainty of employment, and the anxiety naturally to be expected in consequence, he speaks of the added comfort that would be gained if employment could be made more uniform; but he says, also with great truth, "men work on, reposing in half-recognized faith, based on a half-interpreted experience, in the potential demand that is around them. Happily, as a rule, their faith is justified; for there is a general persistency of opportunity, although particular trades disappear, and the occupation of whole classes of workers may be swept away." The prolonged study of social science, no less than of natural science, gives unexpected confirmation of a mysterious superhuman guidance in the affairs of men, and of that divinity "which shapes our ends, rough-hew them how we will."

No less conspicuous is the utter absence of any heroic remedies; there are many signs that the trend of Mr. Booth's thoughts has been in the direction of individual reform, and the development of existing agencies, rather than any great collective movement to re-organize society. Fuller knowledge

has increased caution, and the elaborate survey of the whole population first, street by street, and then occupation after occupation, has plainly led to a more deliberate suspense of judgment. The investigation is largely one of environment, the prescription is based very much on the regeneration of the individual. "The reform of the individual by the individual" stands rightly in the forefront; immense stress is laid upon fuller and wiser education, "the basis of all industrial reform;" influences which enable a man to act more freely and intelligently himself are more important than those which control him. The writers of this volume treat sympathetically of all that can be done by the community for the help of its poorer members; but they hark back to the need of a vital movement, which shall create a quiet determination on the part of every individual, rich or poor, to do his share.

East and South London have been as quagmires swallowing up great schemes, each of which was to be a panacea for their woes; waves of enthusiasm have led to stupendous efforts. A Palace of Delight was to bring sweetness and light to desolate homes; General Booth's elaborate "Darkest England" scheme was to be so complete that poverty was to be dealt with on every side, and the problem of the houseless and workless vanish; university settlements were to show the churches a more excellent way, and to weld together the gilded youth of Oxford and Cambridge with the artisan and docker in a league of personal fellowship; missions and movements of the most varied character have been initiated. Most of these agencies are doing useful work, but no one would now be thought of as a solution of the riddle of the sphinx: these have become auxiliaries to those older forms of Christian and philanthropic effort which are slowly changing the community. It is noteworthy that in the present Diamond Jubilee year there is no proposal to launch any great movement for London, but a laudable desire to consolidate the many beneficent agencies at present at work.

This ninth volume is veritable pematican: it is a marvellous condensation

of the preceding eight; hence it is a repertory of facts for those who want results and to ascertain the outcome of the whole inquiry. We shall glance at a few of the most significant features, giving preference to those which a non-technical reader would least expect to find.

The Londoner is continually being elbowed out of many trades by those who are country-born; only fifty and two tenths per cent. of the heads of families in London were born in the metropolis. The variations in different trades are remarkable; the greatest number of those born in London are in trades connected with paper, printing, and book-binding. The greatest proportion of born Londoners is found in the crowded central districts.

But while the cockney thus goes to the wall, London, as a centre of commerce and trade, maintains its long-established pre-eminence. It is a characteristic of modern industry that supply forestalls demand; manufacturers no longer wait for orders, but seek to stimulate trade by placing their products on the market in order to develop the appetite of the public. London has no single staple industry similar to those which dominate midland and northern manufacturing towns, and every few years there is a pessimistic wail that its trade must soon pass away. Some of its former industries have largely gone elsewhere—shipbuilding to the Clyde and to Belfast, chair-making to Wycombe, dyeing and cleaning to Scotland—but the marvellous activity of the colossal city shows no signs of abatement. Competitors assail it with many advantages, but London continues on the even tenor of its way, like a mighty vessel sailing down a great river of the dark continent, attacked in vain by the swarm of canoes which seek to check its progress. Yet the disadvantages of London are many, and would prove fatal if a new start had to be made. It has neither cheap coal nor cheap iron; no natural facilities for economizing force by the use of water-power; scanty light compared with other districts in many of its workshops; employers have to pay far higher wages than elsewhere. On the other hand, in the vast popula-

tion of the city there is a unique market at its very doors. And London continues to be the great middle-market for the supply of the whole country—a great purchasing centre for those who live elsewhere. "Everything can be bought in London, and therefore every one comes to buy." In London skilled service of every character, from the surgeon-specialist to the bookbinder, can be obtained without difficulty. Extremes indeed meet in London; the roughest and cheapest labor exist side by side with the most developed and highly specialized; "London grinds out of her industrial mill both the best and the worst;" from it are sent forth the men who direct the engineering triumphs of the world, or reorganize the finances of nations; within its borders are found the poor wretches who pick up their miserable pittance at the dock gates. Much of the best work of England is entrusted to London firms; the most delicate work in jewellery, the best scientific instruments, the best work in stained-glass windows, the best organs, still come from London on account of the superior excellence of the work of the London artisan. Very much of finishing and fitting work is done in London, as well as a vast amount of repairing work, due to its being the greatest port as well as the greatest city in the world.

It is not surprising that the very immensity of London attracts men; the mother-city of the empire and of the English-speaking race grows upon all who visit it. A distinguished essayist has well said, "a small London would be an abomination, as it fortunately is an impossibility, for the idea and the name are beyond everything an expression of extent and number." The London-lover "fancies himself for being a particle in so unequalled an aggregation, and its immeasurable circumference, even though unvisited and lost in smoke, gives him the sense of a social and intellectual margin."¹ If it seems the voice of the intoxicated worshipper which sings of London as the

Too blest abode—no loveliness we see
In all the earth, but it abounds in thee!

¹ Mr. Henry James.

45s. a week. In each trade there is enough focussing of wages to indicate a standard wage for the trade; but this is seldom the weekly earnings of more than one-third of the total number employed. To take one illustration: out of 2,436 printers there are 404 who receive 38s. per week, 128 who receive less than 20s., 115 who receive 20s., smaller numbers who receive wages of intermediate amount, 184 who receive 40s., and 740 whose wages are above that sum. The wages scale is most delicately adjusted to the different capacities of the men.

The present generation has witnessed the growth of monster works, and it has become the custom of those who look for social reconstruction on the lines of collectivism to insist on the comparative ease with which the state will be able to assume control of the means of production on account of their concentration in mammoth enterprises; the industry can be taken at one fell swoop and absorbed without difficulty. But London presents remarkable evidence of the persistence of quite small factories and businesses. The figures would indeed be perceptibly modified if the great industrial and manufacturing suburb of West Ham had been included in Mr. Booth's statistics; for on the banks of the Thames and the Lea, in "London over the border," there are found some of the largest factories in the metropolitan district. Taking London proper, we find that, in spite of the existence of many great and famous factories, the average number of men under each employer is remarkably small; thus, among bookbinders it is only twenty, among printers thirty-three, while the engineering firms are as low as twenty-seven, and with watch-makers no more than four men are on the average employed by a master.

Moreover, in a great many trades, large numbers work on their own account, are neither employers nor employed; thus, while among tailors there are 3,767 masters employing on the average six men each, there are as many as 3,363 who work on their own account. London is the stronghold of small industries. The result is the reversal of many ideas; we see that in-

stead of the absorption of small concerns in large undertakings, so often regarded as the prevalent symptom of the period, there is in London—when the municipal and public services, the great transport system, and the gas works are excluded—a vast preponderance of quite small businesses. It is plain that in the metropolis there is needed an exceptionally large number of factory inspectors to secure adequate supervision.

A hundred and sixty years ago Dr. Samuel Johnson described London as "the common sewer of Paris and of Rome," and declared that

By numbers here from shame or censure
free,
All crimes are safe but hated poverty.

This mournful truth is everywhere
confessed—

Slow rises worth by poverty depressed;
But here more slow, where all are slaves
to gold,
Where looks are merchandise, and smiles
are sold.

In his final summary, Mr. Booth concludes that about thirty per cent. of the population must be classed as poor, by which is meant that, without being in actual want, they need more of everything for comfort; such people would have an average income of about twenty-one shillings per week. It is found that there are from three to two and one-half unoccupied and dependent persons in the ordinary working-class household, so that it results that about five shillings and threepence is available each week for each unit in the family. Another third of the population has about ten shillings more per week—this includes many retail tradesmen and small masters; this section of the population may be considered to enjoy comparative comfort. The remaining third of the population includes all who are better off. In the lowest section there is embraced the destitute. "The common lodging-house caters for their necessities and the public-house for their superfluities." This residuum of the population is a disgrace to the community rather than a danger; though smaller in relative number than is often supposed, it represents an

appalling mass of suffering. The denizens of common lodging-houses (some twenty thousand in number) and the dwellers in the most crowded tenements of Soho and East London present an unsolved problem to philanthropists; and the bitter cry of desperate men and destitute children makes it impossible for us to rest complacently in the brilliant record which tells of the general progress of the people. Happily, at the present moment, the labor department of the Board of Trade shows a smaller number of workers out of employment throughout the country than at any previous period since 1890. Mr. Booth seems to have convinced himself that a steady man who knows his trade can generally secure employment. It is, of course, true that employers, when business is slack, weed out their less regular and competent workers, and dispense first of all with devotees of "Saint Monday," and men who habitually make their Sunday last three days. But it will be found that in times of trade depression there are many good and steady workmen who have to stand off.

Drink remains the greatest cause of the poverty of the poor; the amount of money spent on it is enormous, and the evil will have to be attacked both directly and indirectly on every hand. But in spite of all the influences which militate against the well-being of men, there is no room for doubt that London is brighter and better than for two centuries and a half; during the past generation life has become sweeter and purer; in matters sanitary, educational, and social, gigantic strides have been taken; earlier in the queen's reign there was a depth of degradation and a moral coarseness in ordinary life which would now revolt the inhabitants of fœtid slums; an intenser civic spirit, a deeper earnestness, and a more hopeful outlook fill with thankfulness the heart of the humble worker, as he sees signs that

Life shall on and upward go;

Th' eternal step of progress beats
To that great anthem, calm and slow,
Which God repeats.

F. W. NEWLAND.

From Macmillan's Magazine.

THE LESSER ELIZABETHAN LYRISTS.¹

Lyrics are in a sense the most interesting things in poetry. They are like an artist's sketches, which bring one nearer to him than his finished work; and it seems so natural for every poet to express his personal feelings in this form that it is hard to realize a period of literature when the lyric did not exist. Yet in all great original literature lyrical poetry develops after narrative poetry has begun to decline, and before drama has emerged. So it was in Greece, so it was in England. Chaucer was dead half a century before Dunbar, Henryson, and others brought French models into Scotland; and in England the poetical renaissance came somewhat later, and came from the fountain-head of Italy. The two men who introduced lyrical poetry into England were Sir Thomas Wyatt and Henry Howard, Earl of Surrey. Both were conspicuous figures at the court of Henry the Eighth and distinguished in the tilting-yard as well as by their poetry. Their high position enabled them to set the fashion in this matter, and for a century and more, up to the wars of the commonwealth, verse-writing was a favorite accomplishment of the nobles. The list of fine gentleman poets includes, besides Wyatt and Surrey, Lord Vaux, whose work was published with theirs, Sackville, author of "The Mirror for Magistrates," Sir Walter Raleigh, Lord Oxford, who challenged Sidney to a duel, Sidney himself, Edward Dyer, known now as a poet by the single line "My mind to me a kingdom is," Fulke Greville, Lord Brook who wrote for his epitaph, "Servant to Queen Elizabeth, Counsellor to King James, and Friend to Sir Philip Sidney." Last, not least, whether as poet or courtier, was the great Earl of

¹ 1. "England's Helicon;" edited by A. H. Bullen. London, 1887.

2. "Lyrics from the Dramatists of the Elizabethan Age;" edited by A. H. Bullen. London, 1891.

3. Lyrics from the Song-books of the Elizabethan Age;" edited by A. H. Bullen. London, 1891.

Essex. In a later day came Sir Henry Wotton, the diplomatist, and the famous group of cavaliers, Suckling, Cleveland, Carew, Montrose, and above all, Lovelace, the handsomest man in the army, who wrote to his lady-love two of the most perfect songs in the world, and was jilted for his pains.

The work of Wyatt and Surrey circulated during their lives in manuscript, and was first published in Tottel's "Miscellany of Songs and Sonnets," printed in 1557. This book went through nine editions in thirty years, and Master Shallow, as we know, owned a copy. Wyatt and Surrey died young, but they had done a great work. Surrey's is the more facile verse, Wyatt's the deeper strain of feeling; yet, when all is said and done, they were only pioneers; although they afford passages of a simple and genuine poetry, their work is the work of men feeling their way and experimenting. Forty years later lyrical poetry was firmly established, and from 1579, when "The Shepherd's Calendar" was published, we are in the great Elizabethan period. Before Shakespeare the writers fall into two schools, between whom the division was sharply marked, for it was social. The first was the school of the courtly makers, which culminated in "The Faery Queen," that last and greatest of mediæval allegories, the swan-song of chivalry, and the supreme expression of the cult of Queen Elizabeth; the work of the second school was the work of hack-writers, disreputable dramatists, and needy players, who in poverty, contempt, and outlawry brought modern poetry obscurely to the birth. The contrast of these schools proves one thing clearly: that the man who writes most will probably write best, and certainly that the man who writes for his living will write with more vitality than the distinguished amateur. The poet of the coteries may be a true poet, but not the supreme poet. Spenser is the sublime of a poet of the coteries, but the poet of a nation may be Shakespeare. Roughly speaking the poetry that will

last is the poetry that pays; Milton is the chief instance to the contrary, but he was an unpopular outlaw when he published "Paradise Lost." Shelley and Keats never lived to see their battle won. Great poets, poets who really touch and stir mankind, are not so common that mankind can afford to neglect them for long; and mankind gives them bread and it may be a little butter. But the poet of the coterie can seldom find an audience large enough or warm enough to keep him in existence; and Spenser with all his fame and influence, found out for himself this bitter truth. Shakespeare made a modest fortune; but stern necessity had taught him the art to make out of so subtle a study as "Hamlet" the most popular stage-play in English. To get money out of people's pockets by poetry, you must be in touch with life, and that is what the poet of the coterie is not.

Of the two schools, the courtiers undoubtedly had, man for man, the better brains; but the curse of the amateur was on them all; they wanted the certainty that comes of long practice, and they departed from the simplicity of nature. The noblest of them all, and the most splendid instance of the amateur in poetry, was Sir Philip Sidney.

He was born in 1554, and he died in 1586. His experiences of the world opened when he was nineteen with the sight of the massacre of Saint Bartholomew in Paris, which he beheld from the house of the English ambassador. This gave a purpose to his life, and thenceforward he was a steady champion of Protestantism. From France he went to Germany, and there contracted a close intimacy with Hubert Languet, Melancthon's convert, one of the leading reformers, with whom he maintained a remarkable correspondence which still survives. Continuing the grand tour, as was then the custom, Sidney spent eight months in Italy, where his portrait was painted by Paul Veronese. After three years of travel, pregnant with experience, he returned and entered politics, which had been the oc-

cupation of all about him since his boyhood. His father, Sir Henry Sidney, was thrice Lord-Deputy of Ireland. Before Philip was thirty, William the Silent, no mean authority and no waster of words, wrote to congratulate Elizabeth in possessing in him one of the foremost statesmen in Europe. While still a plain gentleman of England, he was proposed as a candidate for the Elective Crown of Poland; and when he died at thirty-two, more famous even in his death than in his life, the nation went into mourning for him as though he had been a prince of the blood.

As a literary man he was of the coterie which centred round a little critic, Gabriel Harvey, whose mission was to Latinize English literature, and a great poet, Edmund Spenser, Harvey's friend. Raleigh, too, was of their number; but Fulke Greville and Edward Dyer were Sidney's closest friends; they were, as they called themselves, a happy Trinity.

Sidney wrote a good deal, including some English hexameters to please Harvey; but his fame as a poet rests on the series of songs and sonnets known as "*Astrophel and Stella*," which, as everybody knows, is the record of a love-tragedy. The history is briefly this: Sidney was affianced to Penelope Devereux, daughter of the Earl of Essex, whom he saw first in 1575, during the famous revels at Kenilworth. She was then only thirteen, but engagements were made early in those days. However, marriage would, presumably, not have been possible before 1578, when Lady Penelope (*Stella*) was sixteen. Now at this time Sidney was very busy with politics and by no means rich; but his prospects were good, as he was heir presumptive to the favorite, Leicester. In this year, however, Leicester was married again to *Stella's* mother; and Sidney, with a prudence he afterwards bitterly regretted, indefinitely postponed his own marriage. In 1579 Sidney's prospects were ruined by the birth of an heir to Leicester; and further, he had the misfortune and the boldness to offend the queen by writing a memorial against

the French marriage then in prospect. He was forced to retire to Wilton, the lovely home of his sister, Lady Pembroke. During his absence from court, a match of convenience was made and carried out in the peremptory Elizabethan way for *Stella*, and early in 1581 he learned that his betrothed was wedded to Lord Rich, a stupid and profligate nobleman.

It is easy to understand what followed. Sidney's engagement, originally one of convenience, had grown into an attachment, but his prudence had deterred him from marrying on expectations, and politics had probably put love-making out of his head. Then followed disappointment, rebuffs at court, and the long absence from *Stella*; and finally, the sudden news that whatever consolation he might have proposed to himself in marriage was snatched from him. His feelings vented themselves in the passionate dirge:—

Ring out, ye bells, let mourning shows be spread.

For love is dead.

But he returned to court, and there had abundant opportunities of meeting *Stella*, whose husband he disliked and despised. So began the story chronicled in the last seventy of these songs and sonnets. It is a story of passion, and of unlawful passion; but it has the one character which redeems unlawful passion as a subject for art,—it describes the baser passion acting upon a noble nature. The steady and uniform process of corruption which half the French novels of this century describe is not varied enough to be dramatic; who wants to know how a character rots? But when there is present a force capable of offering resistance to the poison, then you have a struggle and a drama,—the drama of passion.

Sidney's tale opens with the wooing; gradually the knowledge dawns that his love is answered; to certainty succeeds acknowledgment on both sides, and Platonic talk of beauty that is virtue.

But, ah! desire still cries, "Give me some food."

To a kiss stolen from *Stella* sleeping

succeed kisses returned; then comes a nightly scene of Love and Duty, the counterpart of Tennyson's, but here it is the woman who is strong. Angry reproaches follow, and lastly another scene, not this time by night but

In a grove, most rich of shade,
Where birds wanton music made.

But the conclusion is the same:—

Tyran honor doth thus use thee,
Stella's self might not refuse thee.

Therefore, dear, this no more move,
Lest, though I leave not thy love,
Which too deep in me is framed,
I should blush when thou art named.

Therewithal, away she went,
Leaving him so passion-rent,
With what she had done and spoken,
That therewith my song is broken,

That is the dramatic end; but this is a history, and in life one cannot drop the curtain. So Sidney's passion sadly spends itself in hopes and fears and memories, while his brain is

So dark with misty vapors which arise
From out Grief's heavy mould, that in-
bent eyes
Can scarce discern the shape of mine own
pain.

Lastly comes the gradual return to the old preoccupation; Stella shall still be right princess of his powers, but he prays her:—

Sweet, for a while give respite to my
heart,
Which pants as tho' it still should leap to
thee;
And on my thoughts give thy lieutenancy
To this great cause, which needs both use
and art.

Oh, let no fools in me thy works reprove,
And, scorning, say: "See what it is to
love!"

Years later, Lady Rich, worn out by her husband's ill usage, deceived and left him. It may have been the inevitable result of many years' weariness; but one prefers to think that, had Sidney been the lover, the reaction of his character on hers would still have raised and not lowered her. It is so

much easier for a woman to resist a good man than a bad one.

The interest then is in the story, the cumulative effect of these sonnets. Singly they are interesting, written, as he sings, on the highway his "chief Parnassus," tempered to the trampling of his horse's feet "more oft than to a chamber melody;" telling, sure sign of love, of all his ways and works; for passionate love colors a man's whole life, and is colored by it. Frigid sonneteers tell you eternal things about their mistress's eyebrow. That is not passion; passion is egotistic, and paints itself. So we hear of Sidney's politics in the questions men ask of him—questions which

I, cumbered with good manners, answer
do,
But know not how; for still I think of you.

We hear how he has won the prize in a tournament over the English champions and "some sent from that sweet enemy France;" of his namesake, Phillip, Stella's sparrow, and a hundred other pretty trifles. The ease of the verse is apparent; indeed all through the sonnets it is too easy. Yet what strikes one most, in the sense, perhaps, is the occasional felicity of phrase in lines like

Wise silence is best music unto bliss;

or in the first sonnet, where he describes his efforts, racking his brains, to write a verse acceptable to his lady:—

"Fool!" said the muse, "look in thy heart
and write."

Yet the truth is that a flashing phrase here and there will not make great poetry. Collectively, "Astrophel and Stella" is great poetry; but that is rather because it is the history of so rare a nature. Singly, no poem of Sidney's reaches perfection; the best of them will still be marred by a line that wants weight, or an awkward phrase, or an ill-chosen metre, or a certain thinness of texture throughout. They are in salient contrast to Shakespeare's sonnets, a terrible contrast. It would be hard to say whether in Shakespeare's lines there is more passion or more

poetry; there is more of either, in any case, than literature can elsewhere show in equal space. There are single sonnets that have compressed into them more poetic thought and more beauty of phrase than the whole of Sidney's verses. But it is a bitter story that hides itself, ashamed to be seen. Here the poems gain all by being read singly; in Sidney they lose all.

Still, in praising Sidney's character, it must be admitted that this is his chief charm as a poet. His story interests, and he is by nature a poet; but the poet must be made as well as born, and Sidney never subjected himself to the necessary self-criticism. He has the faults of his time, the conceits and the rest, though no more in this respect than Shakespeare; but he has also the faults of the amateur. The sonnet shows him at his best where the form itself imposes a constraint; his more purely lyrical work—his songs for instance—are faulty.

There lived also in Sidney's days—as a great contrast to that gallant gentleman as you can imagine—a man whose existence Sidney could scarcely have stooped to recognize, and yet who, as an artist in verse, is incomparably above the more poetic character. There was no poetry about Robert Greene's life, nothing but squalor and base shiftiness. He was born about 1550 in Norwich; went in course of time to Cambridge, and there, he says, "I lit among wags as lewd as myself, who drew me to travel in Italy and Spain, in which places I saw and practised such villainy as is abominable to describe." He became, as the proverb went, an Englishman-Italianate before he returned home to Norwich. Then by some accounts he took orders; but we may give him the benefit of the doubt. One day, however, in Norwich Cathedral a sermon affected him powerfully, and he was for a time induced to contemplate reform; but the good motion lasted him only till he met with certain comrades, who mocked at him for a Puritan, and restored him to his old habit of life. However, at this time—whether in pursuance of his intent to reform or not—he married a virtuous woman, and had a child by her;

but when her dowry was spent, he de-

serted both mother and child. He went to London, where his decent acquaintances at first helped him; but, as he says, "though I knew how to get a friend, yet had I not the gift or reason to keep a friend;" and very soon, when he could find no one to sponge upon, he was forced to live by his wits. Happily for him, they were of the wittiest. Soon he was "famoused for an arch play-making poet, yet his purse ebbd and swelled like the sea; but seldom he wanted, his labors were so well esteemed." They were not labors of love. "He made no account of winning credit by his works; his only care was to have in his purse a spell to conjure up a cup of good wine with at all times." That was how Nash, one of his intimates, wrote of him. Nash was, like Greene, a Cambridge man, a witty, bitter little pamphleteer, a journalist born out of due time, yet a poet, too, by flashes.

George Peele, another University man, was of the same group of Bohemians; better than Greene as a writer of plays, but inferior in lyric gift. Thomas Lodge, a third yokefellow in iniquity, wrote plays, satires, prose, romance, and two of the most beautiful Elizabethan lyrics. Last, and incomparably the greatest of the group, was Marlowe, of whom nothing need now be said. More disreputable men than these five were not to be found in all London. Villon would have been welcomed as a brother among them. They were drunken, debauched and wild in their talk, fearing neither God nor man. Nash was the least gifted of them and the least Bohemian; indeed, he subsequently resented strongly the charge of intimacy. Marlowe, a fiercer spirit, shocked the world more by his atheistical talk than Greene and Peele by their base life and cozening shifts.

Greene's mistress, by whom he had a son, named in irony Fortunatus Greene, was sister to a chief among the thieves and footpads of London, destined to end on the gallows; and Greene, in a fit of repentance, as he said, or urged by the craving for copy, wrote a history of Coney Catching, or ways of cozenage. He was himself a big, jovial animal, with hair worn long, and, as Nash says, "a jolly long red peak, like the spire of

a steeple, he cherished continually without cutting, whereat a man might hang his jewel, it was so sharp and pendant." But his way of living could not last; disease came on, and with disease the man's hysterical nature took a religious turn. Greene had the sort of temperament which in these days finds its natural refuge in the Salvation Army. He published "The Repentance of Robert Greene," describing his life; and on his death-bed, as most people know, he produced the tract called "Greene's Groat-worth of Wit Bought with a Million of Repentance," in which occurs the well-known attack on Shakespeare.

The manner of Greene's death is curious indeed, and affecting. A surfeit of hock and herrings was his fate. He retired to his lodging with a poor shoemaker's widow, and there, tended only by her charity and the affection of poor Fortunatus's mother, he made a miserable end. His good landlady buried him, as she had housed him, at her own expense, and with touching veneration laid a laurel-wreath upon his grave. Gabriel Harvey was engaged in an unseemly controversy with this band of Bohemians, and after Greene's death he made a most discreditable attack upon the dead man's memory; but he has thereby preserved, though in no kindly spirit, this pathetic letter from Greene to his deserted wife. He had given his host a bond for ten pounds. He wrote: "Doll,—I charge thee, by the love of our youth, and by my soul's rest, that thou wilt see this man paid; for if he and his wife had not succored me, I should have died in the streets." There is also a posthumous letter of his published with the "Groatworth of Wit," in which, after drawing a terrible picture of his own sins and their punishment, he commends to his wife's care his illegitimate son. No man could give stronger testimony to his belief in the virtue of a virtuous woman than did this poor reprobate in these letters.

That is enough, and more than enough, of a chronicle. But it is interesting to see what this unwashed mercenary scribbler, this ruffianly Greene had to say:—

Sweet are the thoughts that savor of content,—

The quiet mind is richer than a crown;
Sweet are the nights in careless slumber spent,—

The poor estate scorns fortune's angry frown:

Such sweet content, such minds, such sleep, such bliss,

Beggars enjoy while princes oft do miss.

The verse is perfect in style; its quiet metre suits the quiet subject. But why did Greene write this sort of thing? It is almost a commonplace of Elizabethan poetry, this theme of pastoral felicity, the favorite topic of the poets in that restless age. The men who liked that sort of poetry were the men who helped Drake and Hawkins. Their adventurous, roving existence found its solace in dreams of quiet, their aspiration after El Dorado its complement in sweet content. Nowadays in this level-running life of ours, of many words and few blows, imaginative writers turn back to the Homeric days, to the heroes of the ballad and the saga, and write of what they call simple human passion, of big bones and heavy strokes. Our ideal of mental simplicity is the Homeric chieftain; for the Elizabethans it was the shepherd. In this way every age has two ideals: its true ideal, the ideal of fulfilment, the sum of its hopes and aspirations, hardly seen or grasped by itself as a totality; and its false ideal, the ideal of contrast, the desire for what is not. Shakespeare deals little in pastoralisms. He gives us rather "the very form and pressure" of his time; yet sometimes he too turns from vivid experience and the bustle of his world to rest his thoughts upon pastoral repose; as we, from out our drab-colored existence, look longingly Eastward, it may be with Kipling, or Westward with Bret Harte, for life and color.

No one rendered with more truth the ideal of repose than this ruffianly Greene. Nothing could be less ruffianly than his verse. Like many artists, he lived two lives, the actual and the ideal. His body dwelt among slatternly women; his mind conversed with goddesses. He had been in Italy, when Titian was not yet dead and Tintoret

was painting; he was Italianate for good as well as for evil, and he saw things like a Venetian painter. Listen to this:—

With that appeared an object twice as bright,
So gorgeous as my senses all were damp;
In Ida richer beauty did not win
When lovely Venus showed her silver skin.

Her pace was like to Juno's pompous strains

Whenas she sweeps through heaven's brass-paved way;

Her front was powdered through with azured veins

That 'twixt sweet roses and fair lilies lay.

Or to this again:—

Her cheeks, like ripened lilies steeped in wine,

Or fair pomegranate kernels washed in milk,

Or snow-white threads in nets of crimson silk,

Or gorgeous clouds upon the sun's decline.

These things are in the grand style, and they show Greene in his most characteristic aspect, as the artist in words. Here is a still finer passage, with its ascending climax, to which the movement of the verse leads up:—

Ah! were she pitiful as she is fair,
Or but as mild as she is seeming so,
Then were my hopes greater than my despair,
Then all the world were heaven, nothing woe.

Ah! when she sings, all music else be still,
For none must be compared to her note;
Ne'er breathed such glee from Philomela's bill,

Nor from the morning singer's swelling throat.

Ah! when she rises from her blissful bed
She comforts all the world, as doth the sun;

And at her sight the night's foul vapors fled;

When she is set, the gladsome day is done.

O glorious sun! imagine me the West,
Shine in my arms, and set thou in my breast.

It is a conceit, but a conceit trans-

figured and glorified by imagination. Sidney would have left it cold and lifeless. In a very different strain is Sappho's song to her child with its burden:—

Weep not, my wanton, smile upon my knee,
When thou art old, there's grief enough for thee.

The pathos of this song, perfectly natural and unforced, constrains one almost to ask, if this man lived two such lives, which was the real Greene? At all events, the authorship of these exquisitely tender and pathetic verses is morally speaking the most creditable thing known about Greene.

But is not a strange thing that a man so unpoetic in his ways of life should have left us so much perfect poetry, while Sidney, who was himself (in Milton's fine phrase) a true poet, has been so far less successful? It is not that Sidney had less aptitude than Greene, but that he had less practice. Greene was incessantly writing,—plays, pamphlets, novels, and the rest,—and he attained to a style. Sidney's defect is the lack of a sustained style; style is Greene's merit.

What is said of Greene's work applies to that of his fellows; what is said of Sidney applies not only to the amateurs of his day but even to Lovelace and Suckling. Exquisite as their work could be, it was only good by flashes.

But perhaps the most extraordinary feature of the Elizabethan literature is the abundance of unclaimed verse, which is in lyric quality equal to any but the very highest excellence. "Tottel's Miscellany" was only the first of a string of collections, of which the most famous and popular was "England's Helicon." All the known poets contributed to these, but many also who are unknown. In addition to these, there were innumerable song-books published with music, and since in those days, when music was not understood or appreciated, people took some thought what they sang, these song-books are full of the same lyrical vein. Whether the author of the music was also author of the verse is a moot point.

The history of these minor Elizabethan poems has been curious: forgotten in the stress of the Civil War, they slept till within the last twenty years the increased study of our literature brought them into notice; and mainly through the taste and energy of Mr. A. H. Bullen they have been printed and sold with great success. Even his selection of lyrics from the Elizabethan Dramatists is hardly more charming a volume than his *Anthology* from the *Song-Books* of which a second edition has just appeared. Indeed it is not we only who should be grateful for these delightful books. Take, for instance, the poet Campion, a musician as well; probably thirty years ago not thirty men in England knew his name. In the first edition of "*The Golden Treasury*" he was unrepresented; in the latest you will find ten of his poems. What retribution will the shade of Campion make to Mr. Bullen?

Thou hast bestowed on me a second life;
For this I live thy creature.

But Campion is only one of many: William Byrd, Robert Jones, Rossiter, and Dowland, "whose heavenly touch upon the lute doth ravish every sense;" above all, Richard Barnefield. In 1599 was published "*The Passionate Pilgrim*," which was attributed to Shakespeare. But in those days publishers were not nice in their principles, and two poems in the collection are Barnefield's. One of them is the famous ode beginning "As it fell upon a day," and perhaps few lines in Shakespeare are better known than:—

King Pandion, he is dead;
All thy friends are lapped in lead;
All thy fellow-birds do sing,
Careless of thy sorrowing.

Yet fifty years ago Barnefield was a forgotten name; his ewe-lamb had gone to swell Shakespeare's teeming flocks. And it is so throughout; here and there modern scholarship and research has succeeded in identifying the authors of anonymous or wrongly attributed poems; here and there it has even discovered for the curious a few details in the lives of these forgotten men.

But in many, in too many cases the name and fame of the authors has passed out of the world with the joy they had in writing; only these songs smell sweet and blossom over their graves. And that raises a curious question: which is the highest fame, that a man's work should survive him or his reputation? Akenside, for example, is a respectable and an amiable name, nor likely to be forgotten, at least while competitive examinations keep his memory green. But were all Akenside's works by some strange and far-reaching accident to perish to-night, it is doubtful if to-morrow you could restore ten lines of them by oral tradition. Yet you shall find some little poem, out of "*England's Helicon*," fresh as the day it was written and treasured in a hundred memories, though it bears no name to it, or else some fanciful name, the Shepherd Tony, or the like.

Suppose Fate to say to the writer of such a poem: "Three hundred years after your death, men shall still love and prize the things you write, perhaps in some careless moment of a summer's evening; but they will care for them and not for you; not even a syllable of your name shall linger in their recollections,"—what of this? It is not fame,—it cannot be where no man is famous; but it approaches, in a mortal's apprehension, very close indeed to immortality. And even of the other men, who have left us their contributions to this gathered store of song, though not nameless, yet their position in literary history, as they stand but half rescued from oblivion, seems to us in a manner pathetic. They have not, it is true, left behind them a great name blazoned across a long roll of superb achievements in verse; nor does even a trace of their lives survive, as Greene's does, caught, like flies in amber, among the records of a famous history. They have bequeathed to us nothing practically but their writings, and of these how small a portion it is easy to conjecture. Yet it is no trifling heritage; for among all these Elizabethan songs, from the greatest to the least, where the note is purely lyrical, there is the same bird-like freshness, the same easy tuneful

utterance, telling of youth and love and of the spring; ditties and strains that linger in quiet corners of the brain and haunt the mind with restful images.

STEPHEN GWYNN.

From The Cornhill Magazine.
LEGAL PROCEEDINGS AGAINST ANIMALS.

Among the many curious customs and superstitions preserved in the records of the Middle Ages, few are more strange and interesting than the legal proceedings, civil, criminal, and ecclesiastic, brought against offending animals. Few, moreover, combine so strikingly the opposing characteristics of that romantic epoch! its childlike faith and childish superstition; its thoughtless cruelty and lofty ideal of justice for all; its belief in the direct action of God in all the affairs of life, and its doctrine that the prince of this world is the devil himself.

So strange are some of these records that it was suggested that they were composed by ancient lawyers or their clerks as amusing exercises for leisure hours, till they were shown to be genuine by the researches of such writers as Menabrea,¹ Agnel,² and Berriat St. Prix.³

Whatever the frogs of Ireland may or may not have suffered from St. Patrick, there is no doubt that snails, flies, beetles, rats, and eels were excommunicated, or threatened with excommunication, by other saints and bishops, and however fabulous may be the story of the jackdaw of Rheims, it is an historical fact that a cock was publicly burnt at Basle in August, 1474, for the diabolical crime of laying an egg; the egg being also burnt lest it should produce a cockatrice, or fiery flying serpent.

"On the Thursday before St. Laurence's day," writes Gross in his "Kurtze Basler Kronik," "they burnt a cock on the Kolenberg together with an

egg which he had laid, for they feared that a dragon might be hatched therefrom. The executioner cut open the cock and found three more eggs in him. For, as Vicentius saith in the Vith book of his 'Speculum Naturale,' it hath always been held that a cock in his old age may lay an egg whence ariseth a basilisk, if it be hatched out on a dung-heap by the serpent called coluber. Wherefore the basilisk is half cock and half serpent. He saith also that certain persons declare they have seen basilisks hatched from such eggs."

But the animal which most frequently came before the criminal courts was the pig. At Mesnil St. Denis, near Paris, there still exists a spot called *Truye Pendue*, after a sow which was once hanged there for killing an infant, and about twenty similar cases are recorded in France alone by the writers above mentioned. Thus, in 1386, the magistrates of Falaise condemned a pig to have its snout and one leg cut off and then to be hanged for having killed an infant and eaten part of its face and arm. The pig was executed in the market-place dressed in human apparel, and the executioner received ten sous ten deniers and a new glove as his fee.

The following is the statement of expenses sent to the bailiff of Mantes in March, 1403, for the execution of a sow which had killed a baby:—

For her expenses while in gaol	6 sols Parisian.
Item, to the hangman who came from Paris to make the said execution,	24 sols.
Item, for the cart which took her to the gallows,	6 sols.
Item, for cords to tie and drag her,	2sols 8 deniers.
Item, for gloves,	2 deniers.

In all these cases the animal was duly arrested, imprisoned, tried, and condemned with every legal formality.

About the year 1313 a bull belonging to a farmer of Moisy killed a man, whereupon Charles Count of Valois ordered its arrest and trial, which took place accordingly, and the animal was condemned to be hanged. But the order of the Hospitallers claimed jurisdiction over the village, and appealed to the *Parlement* against the judgment.

¹ Les jugements rendus au Moyen-Age contre les animaux, 1846.

² Curiosités judiciaires et historiques du Moyen-Age, 1858.

³ Rapport et recherches sur les procès et jugements relatifs aux animaux.

The latter confirmed the verdict, but declared at the same time that the Count of Valois had no jurisdiction over the territory of Molsy. The bull was hanged in due course. The Council of Worms decreed that, in a case where a child was stung to death by bees, the whole hive and its contents must be burnt.

All these proceedings were based upon the Mosaic law (Exodus xxi. 28) which, as a tribute to the sanctity of human life, ordained that an ox which killed a man was to be stoned, and that its flesh must not be eaten. In the Middle Ages there came the additional belief that such animals belonged to the kingdom of the evil one, and were very possibly possessed by demons, for there was the highest authority for believing that devils might enter into swine, and it was generally held that they might convert themselves bodily into animal forms, more especially those of he-goats and black cats.

Our ancestors, moreover, by no means denied to animals the possession of moral sense, and therefore of moral responsibility. Thus, William of Paris relates, in his book "*De Universo*," iii. 8, how he saw certain storks hold judgment over a female who had deserted her mate and committed adultery, after which they all fell upon her and tore out nearly all her feathers.

Still more interesting than the criminal, are the civil and ecclesiastic proceedings against animals. Insect and vermin plagues are not amenable to magistrates, hangmen, and other executors of the criminal law. Besides, the plagues of Egypt and the threatenings of the prophets show that they are often sent as divine punishments. It was therefore necessary for the victims of such plagues to proceed with caution, and, above all, to call in the aid of the Church, lest haply they might be found even to fight against God.

The usual procedure in such cases has been described by the famous mediæval jurist Chasseneux (1480-1530), president of the *Parlement* of Provence. In the first of his "*Consilia*," or Consultations, published at Lyons in 1531, he discusses the question whether it is lawful to excommunicate destructive animals. He

first adduces nine reasons for holding that such excommunications are absurd and impious, and then brings forward twelve other reasons to show that they are pious, profitable, and edifying. To these he adds numerous instances to prove the antiquity and efficacy of the custom. Thus, God cursed the serpent, and Christ cursed the fig-tree. Eels which caused damage in the Lake of Geneva, sparrows which disturbed the divine service in the church of St. Vincent de Mâcon, disappeared on being excommunicated. He had himself heard sentences of malediction and anathema pronounced against locusts, rats, and snails by the episcopal courts of Autun, Lyons, and Mâcon, after the following procedure. The people of the invaded territory appealed to their bishop or his proctor, who first recommended prayers, penance, processions, and, more especially, the punctual payment of tithes. Should this fail, it was probable that the plague came from below rather than from above, and severer measures might be taken. Still, absolute justice must be observed; an advocate was appointed to plead the cause of the "vermin," and they were only finally excommunicated if they obstinately refused to retire to the place appointed for them.

Such proceedings were sanctioned by the highest authority, for did not Pope Stephen (A. D. 890) drive away a plague of locusts by sprinkling the fields with holy water, while St. Bernard destroyed an innumerable multitude of flies which filled his church and interrupted his sermon by simply pronouncing the words *excommunico eas* ("I excommunicate them")?

According to the historian De Thou, Chasseneux himself first become famous through the skill with which he advocated the cause of the rats of Autun. They had been summoned to appear before the bishop's proctor and show cause why they should not be excommunicated. Chasseneux was appointed to defend them, and began by demanding that the summons should be read in every parish, since the rats were widely scattered, and might otherwise not hear of it. He next excused their non-appear-

ance by saying that the roads were dangerous for his clients, seeing that cats were everywhere lying in wait for them, and finally, having exhausted all modes of delay, he made an eloquent speech on the injustice of proceeding against the whole number at once, and demanded that each rat should be tried separately. This speech, says the historian, was recalled to his memory by the Waldensians when, as president of the *Parlement* of Provence, he was obliged to take part in the persecution of those unfortunate sectaries.

Felix Malleolus, in his "Tractatus de Exorcismis," relates how, in his own days (1451), the Bishop of Lausanne solemnly cursed the leeches which did much harm to the larger fish in the lake. "Whereby he accomplished much in repelling and driving away those beasts. But many persons, not weighing the divine mysteries or entirely ignorant of them, spoke evil of the said bishop on this matter. Nevertheless, all the doctors of Heidelberg having read and considered the thing gave their approval of it."

About the same time caterpillars with black heads and about the size of a woman's little finger did much harm in the diocese of Coire in Switzerland. "In winter" (says Malleolus) "they enter the ground and devour the roots of grass and herbs, so that the whole territory appears withered in springtime. And in summer they take wings and sit on the trees and eat leaves and fruit." They were summoned before the provincial magistrate, but did not appear, so the judge "on account of their small size and tender age" appointed a curator and advocate who urged that they were creatures of God, in immemorial possession of the country, and only followed their natural instincts. "So the inhabitants make a yearly compact with these insects, and devote to them a certain plot of ground, and so it is done to this day."

Very similar to this is the following case extracted by Menabrea from the records of the commune of St. Julien, a place still famous for its vineyards.

In the year 1545 the vineyards were ravaged by a small green beetle or

weevil, *Rhynchites auratus*. The people demanded their excommunication in the episcopal court of St. Jean de Maurienne. But the bishop's proctor replied that the earth was created to nourish insects, as well as men, and that therefore they must not act with too great rashness against these animals, but rather implore the divine mercy, repent of their sins, and pay their tithes. The commune then resorted to arbitration before François Bonnivard, doctor of law, the insects being represented by two advocates; but before the case was finished the beetles had disappeared. They returned, however, shortly afterwards in still greater numbers, and after prayers and processions had failed, the insects were regularly put on their trial, being represented by Antoine Filliol as *procureur* and Pierre Rambaud as advocate. On June 5 the latter proceeded to show cause why his clients should not be excommunicated. He urged first that only contumacious persons may be anathematized, and his clients had not been regularly summoned; secondly, animals were created before man, and were bidden by God to increase and multiply; they have therefore a divine right to the food requisite for this purpose; thirdly, animals are not to be excommunicated for following their natural instincts. Anticipating his opponent's case, he went on to urge that the subjection of animals to man, and the assertion that he who sows shall reap, are of no avail against the preceding arguments, and finally he advised the people of St. Julien to leave the insects alone and repent of their sins like the Ninevites. The advocate of the commune, François Foy, demanded a week's delay to reply to this, at the end of which the counsel for the defence requested a foreclosure; but another week was granted, and on June 19 Foy made a short speech arguing that animals were made for the use of man, wherefore they were acting wrongly if they harmed him, and might lawfully be anathematized. Another week was granted for Rambaud to reply, which he did in much the same terms as before. The plaintiffs seem to have now become doubtful as to the justice of their case, and a meeting of

the parishioners was called for the purpose of granting the beetles some territory where they might increase and multiply without harm to the vineyards. It was unanimously resolved to offer them some waste land near the village of Claret, the inhabitants reserving their right to pass through to certain ochre mines, and also to use it as a place of refuge in war time, "seeing that this place is a safe retreat in time of war, it being provided with springs, which will also benefit the said insects." On these conditions they agreed to grant the territory to the beetles "en bon forme et valable à perpétuité."

This offer was made in court July 24, but the case was adjourned to August 20, and then till September 3, owing to the passage of the Duke of Savoy's troops. On September 3 Antoine Filliol refused the offer for his clients, "seeing that the place is sterile and produces nothing" (*cum sit locus sterilis et nullius redditus*), and demanded a verdict against the plaintiffs with costs. The opposing counsel replied that the spot abounded in trees and herbs, so experts were appointed to go and examine it, receiving three florins for their expenses. Here, unfortunately, the records have become a prey to time and injury, but there can be little doubt that the insects were duly excommunicated.

These curious proceedings may be explained in several ways. The object in some cases, more especially those of later date, was perhaps merely to soothe the minds of the ignorant. Just as the nurse beats the "naughty chair" against which Tommy has knocked his head, so the Church cursed the wicked beetles or caterpillars which had devoured the harvests of her simple-minded children. Sometimes there may have been a wish to inculcate, as in the old "morality plays," lessons of justice and consideration even towards the weakest, and to teach the ignorant peasantry that while all wrong-doing should be punished, the punishment must be inflicted calmly and legally, not by lynch law or the wild justice of revenge. As Menabrea puts it, man was taught to say to the vilest insects: "You are creatures of God; I respect you. The earth has been given to you as well as to me. I am willing

that you should live. But you harm me; you trespass upon my heritage; you destroy my vineyard; you devour my harvest; you deprive me of the fruit of my labors. Peradventure I have deserved all this, for I am but a miserable sinner. In any case, might it not right. I will show you your errors, I will implore the divine mercy, I will give you a place where you may live, but if you still persist I will curse you."

In most cases, however, it is clear that both clergy and people believed in the efficacy of anathemas and excommunications, and the reason for the delay and cautious observations of all the forms of justice was the doubt as to whether these insect plagues came from God or from the devil.

During the period of the "witch mania," these proceedings against animals assumed a more tragic form, and many an unfortunate woman was burnt alive on the accusation of having, by the aid of the devil, produced a plague of flies or caterpillars.

Nor are such proceedings confined to the Middle Ages. The minutes of the meeting of the municipal council of Thonon in Savoy on November 15, 1731, contain the following entry: "Item a été délibéré que la ville se joindra aux paroisses de cette province qui voudront obtenir de Rome une excommunication contre les insectes, et que l'on contribuera aux frais au pro rata."

Perhaps the last instance of a prosecution of animals is one extracted by M. Agnel from the "Nova Floresta" of Manoel Bernardes. The Franciscan friars of the monastery of St. Antony in the Brazilian province of Pledade no Maranhao were much molested by ants, vast multitudes of which devoured their stores, destroyed their furniture, and rendered the very monastery insecure by their minings. All attempts to get rid of them were vain, till a worthy brother, "moved as we may believe, by divine inspiration," advised that they should resort to that spirit of humility which made their seraphic founder call all creatures his brethren, "brother wolf," "sister swallow," etc. Let them bring an action against their sisters the ants before the tribunal of Divine Providence, represented by the bishop.

This was done accordingly, an advocate being appointed to represent the ants. The prosecuting counsel declared that his clients, in conformity with the rules of their order, lived on alms, which they collected with great difficulty, and that the ants (animals whose spirit is totally contrary to the Gospel, and who were therefore abhorred by St. Francis) did nothing but steal from them, and, worse than ordinary thieves, were even trying to ruin and destroy their home. He asked that they should be required to justify these doings, and, failing this, that pestilence and inundations should be invoked to exterminate them. The ants' advocate replied that, since God had given them life, they had a right to maintain it by the instincts bestowed upon them; that they served God by giving men an example of prudence in both temporal and spiritual matters (Proverbs xxx. 25), of charity, peace, and concord, by the way in which they worked together, and of religion and piety, since, according to Pliny, they only among animals bury their dead. Moreover, they worked much harder than did the monks for they often carried burdens larger than themselves. Man, indeed, might be the more honorable creature, but he had offended his Creator, in whose sight he was no better than an ant. Also, ants were the earlier inhabitants of the place, and might therefore justly complain of violent expulsion. Finally, he declared that the earth and the fulness thereof belonged to God and not to the plaintiffs.

At length, after rejoinders and counter-rejoinders, the judge ordered the friars to appoint a suitable place in their neighborhood for the ants, and charged the latter to retire thither at once under pain of excommunication. Thus, he declared, both parties might be satisfied without damage to either; for the brethren had come into that country in a spirit of obedience to sow the seed of the Gospel. This judgment was read aloud before all the ant-holes; whereupon, according to monastic records of January, 1713, "behold a miracle which shows how the Supreme Being, of whom it is written 'He playeth with his creatures,' was satisfied with

the judgment. Immediately myriads of the little animals were beheld marching hastily in long dense columns towards the place appointed for them, and the holy friars, relieved from their intolerable oppression, gave thanks to God for so admirable a manifestation of his power and his providence."

E. T. WITHINGTON.

From *The Academy*.

JEAN INGELOW.

Jean Ingelow (the Jean came from her Scottish mother, and the *g* in the surname is a soft one) was born in 1820 at Boston, in Lincolnshire. She has made music out of Boston bells; more uniformly than Tennyson does Lincolnshire and the East Coast appear and reappear in her poetry. Her father was a banker, and afterwards moved to Ipswich. Banking and Evangelicalism have conspicuously run together in certain well-known families; and they did in hers. Almost Quakerlike some of her likings and aversions might be called. She had no sympathy, for instance, with the war-note which nearly every modern poet has awakened. Even Tennyson, for whom she had an intense admiration, had no message for her there; and the younger poets, who took Tommy Atkins for their hero, could never be hers. In all her many poems not one line, not one word, will be found in justification, still less in praise, of war. In "Kismet" the story of a boy's longing for freedom and the sea is given; and somebody once suggested to her that she had helped perhaps to recruit the Navy. This suggestion meant only horror for her, and she gave the verses a careful re-reading, intending, if she thought that interpretation a possible one, to cancel the offending stanza, or, if necessary, the whole poem. She not only hated evil, she loved to do good. Her charities to the poor were unceasing.

Miss Ingelow's first volume, "A Rhyming Chronicle of Incidents and Feelings," appeared anonymously in 1850. Then in 1863 came the "Poems by

Jean Ingelow," which never paused till fourteen editions had been sold, and which are selling, but less resolutely, to this day. Her fame was made in a month. She was set to music, she was recited, she was parodied by Calverley, and brought out in an illustrated *édition de luxe*. From Boston, not indeed in Lincolnshire, but in New England, she had hundreds of letters and two newspaper notices to tell her that in America, even more quickly than in England, she had made her mark on contemporary sentiment. James Russell Lowell and Oliver Wendell Holmes were her admirers. Even Tennyson was generous in his encomiums. Mr. Ruskin, whose praise has always been precious to women, was at her feet. So that the critic and the casual reader for once agreed together in their appreciation. Or this quick and keen popularity there has been some failure, no doubt, in later days. Her "Story of Doom, and Other Poems," had a welcome only second to its predecessor; but the third series of "Poems" had to make its way among a crowd of new competitors. Time, however, will always right the slight injustice of reaction; and even at this hour there is a sort of remorse of reconsideration among those who have left Miss Ingelow's poems neglected on their shelves these last ten or twenty years. Their old beauty comes as a new surprise. Never hungry for fame, she did not mourn over any signs of its decline.

She did a vast amount of prose-writings in theseventies—"Off the Skelligs," "Fated to be Free," "Don John," and "Sarah de Berenger." Other books of hers were: "Stories Told to a Child," "Studies for Stories," and "Mopsa the Fairy." She wrote with great facility; and she did not alter or polish much in either prose or verse. Though influenced in style by Coleridge, by Tennyson, by Wordsworth, she had her own definite note, distinguishable by its simple freshness. She thought she was meant to be "more original than the creature afterwards become;" but that saying she applied, we imagine, to her life more than to her literature. Among her intimate friends was Mr. Mundella, who survived her only one day.

Very conventional were her surroundings when, after her mother's death, she moved from Holland Street to Holland Villas Road, Kensington. The little house had a little garden; and, perhaps, the greatest excitement in her later life was a garden-party of her own giving. One of the last appearances of Mr. Locker-Lampson was in that very garden one summer afternoon; and in that guest and hostess have passed away types that are rapidly becoming extinct, delightful in old-world courtesy, indulgent to the errors of days gone by, if a little impatient to the moods of a generation younger than their own.

In accounting for the great popularity obtained by Miss Ingelow, one has only to remember how often and how well she sang of the sea: not the sea on which our warships and our mercantile navies ride gloriously, but the sea we have known best in childhood, on which the herring fleet puts forth in the evening. We think, indeed, that Miss Ingelow will be longest remembered as the fisherman's poet. No poet has been more haunted by the roar of winter seas beneath the cliffs on which the lights of the fishing village flit and flicker. No poet has so persistently sung the dirges of those whom the sea has claimed. Take the verses from the "Requiescat in Pace:"—

It was three months and over since the
lad had started:

On the green downs at Cromer I sat to
see the view;

On an open space of herbage, where the
ling and fern had parted,

Betwixt the tall white lighthouse
towers, the old and the new.

Below me lay the wide sea, the scarlet sun
was stooping,

And he dyed the waste water, as with a
scarlet dye;

And he dyed the lighthouse towers; every
bird with white wing swooping

Took his colors, and the cliffs did, and
the yawning sky.

Over grass came that strange flush, and
over ling and heather,

Over flocks and sheep and lambs, and
over the Cromer town;

And each filmy cloudlet crossing drifted
like a scarlet feather
Torn from the folded wings of clouds,
while he settled down.

It is significant that one of the very sweetest lyrical passages in Miss Ingelow's poetry has a terrible context. For the milking-song that my "sonne's wife, Elizabeth," sings in "The High Tide on the Coast of Lincolnshire" is the last her lips make before the tide, deaf to the mad ringing of Boston church bells, sweeps over the pasture. This is how Elizabeth sung:—

"Cusha! Cusha! Cusha!" calling
Ere the early dews were falling,
Farre away I heard her song.
"Cusha! Cusha!" all along
Where the reeey Lindis floweth,
Floweth, floweth;
From the meads where melick groweth,
Faintly came her milking song—

"Cusha! Cusha! Cusha!" calling
"For the dews will soon be falling;
Leave your meadow grasses mellow,
Mellow, mellow;
Quit your cowlslips, cowlslips yellow;
Come uppe Whitefoot, come uppe Light-foot,
Quit the stalks of parsley hollow.
Hollow, hollow;
Come up Jetty, rise and follow,
From the clovers lift your head;
Come uppe Whitefoot, come uppe Light-foot,
Come uppe Jetty, rise and follow,
Jetty, to the milking shed."

Such verse is not great, but it is pleasant. Much of Miss Ingelow's poetry speaks from the heart; particularly is this true of the verse which we will quote in conclusion:—

O my lost love, and my own, own love,
And my love that loved me so!
Is there never a chink in the world above
Where they listen for words from below?
Nay, I spoke once, and I grieved thee sore,
I remember all that I said,
And now thou wilt hear me no more—no more
Till the sea gives up her dead.

From Knowledge.

THE SWIFT'S NIGHT-FLIGHT.

During June and July, dwellers in places where the swift abounds may investigate its recently discovered habit of soaring upward at evening and (apparently) spending the night in the sky. This interesting incident may be observed in June more easily than in July, because the evening sky is clearer in the former month than in the latter. It was just ten years ago that observers in England first noticed this extraordinary behavior on the part of a diurnal British bird; and during that cloudless Jubilee June three persons were watching, night after night, the soaring swifts.

One of these observers was Mr. Aubrey Edwards, son of the vicar of Orleton, R. S. O., Herefordshire, who often saw the swifts from Orleton Church depart upward at night; and he, with his father and brother, remained in the churchyard until 10.30, or even 11 o'clock, watching for the birds, which did not return. There were about forty of these ascending swifts, which Mr. Edwards justifiably conceived to be males; and other swifts remained in the nests.

In the same month Mr. Douglas Brodie, of Croydon, was making similar observations on the colony of swifts which lived under the eaves of the houses in the centre of that town—as appears from his reply to a query of the writer at a later date. "A certain number of the colony, after the rest have gone to roost, go soaring up in circles with a peculiar quivering of the wings, till they go clean out of sight. With field-glasses I have seen them nearly a minute longer."

On the 10th of June, 1887, the writer was watching a large flock of swifts from a garden halfway up Stroud Hill, in Gloucestershire. The air was very clear, and the swifts whirled across and across the sky. The sun had set, but the birds did not descend. They finally went right up out of sight. On the 21st the swifts at Stroud exhibited

the same wonderful behavior, which was recorded.

Since then I have every year watched for the upward night-flight of the swifts; but as the flights occurred at a rather inconvenient time for observation, there were often several successive evenings on which nothing of the kind was seen. Often, also, the birds would fly away towards the horizon, though when they did this late in the evening their course was generally an upward one. They were, however, no less inclined to a lofty flight on a cloudy night than on a clear one; and I often saw them vanish into the clouds. But this never happened when the air was very thundery.

It is convenient to watch the swifts from a somewhat elevated spot, so that they may be kept within view as continuously as possible, since, if they pass out of the field of vision at a distance, it is almost impossible to find them again. It is also desirable to have a support to lean upon, for without this the constant gazing towards the zenith becomes very tiring, especially if field-glasses are used. It is not often that the birds can be seen during the whole of the upward flight; they generally swing around in wide circles for some time, and pass out of sight towards the horizon, after which the repeated cry, *succ ree*, first indicates their return. The whole incident, as it generally occurred, may be described as follows:—

The sun has set, and most of the small birds have retired for the night, though the sparrows are still noisy in the creepers on the house. Most of the swifts are flying low over the meadows, but some are in the sky; and of these a few are chasing others, and performing those magnificent swoops by which it appears that the males drive the females to their nests. Certain it is that the pursuing birds (always acting singly) chase particular individuals, whose course they follow at a greater altitude, but always with the intention of finally descending in a falcon-like stoop at the lower bird, who, anticipating the attack, swerves

downward, and finally plunges headlong. The swishing sound produced by the descending swifts can be heard at a considerable distance. The pursuer mounts again, almost vertically, and renews the assault. This goes on for some time, and when it ceases many of the swifts have already retired to the nests. The others begin to pursue each other in noisy groups, at about the level of the housetops, and this game is kept up for a quarter of an hour or longer, the birds traversing a wide area, and being sometimes out of sight for several minutes. Then they continue the same sport at a higher level, no longer descending so low as the roofs.

At about forty minutes after sunset (whether in June or July) the group of swifts begins to whirl round and round like a mob of rooks; but again and again the cluster breaks up in a pursuit and a mad noisy rush across the sky. Yet the birds are gradually attaining a higher position, and their screaming becomes the less noticeable. Their wings have often a tremulous motion, reminding one of the flight of an ascending skylark. Still, there is no deliberate upward flight—only a succession of swoops and rushes terminating at increasing distances from the ground. The birds keep fairly together, and not one descends to the houses; but it may be that the cluster is joined by another group, coming you know not whence. Dusk is beginning to fall, and even the sparrows are silent; but the cries of the swifts can yet be faintly heard. The birds may now be easily lost sight of altogether, especially if there be no white fleecy clouds high overhead to throw into relief the whirling black dots in the sky. Now is the time to use a field-glass or a small telescope, and, having once found the birds with it, to keep them within the field as long as possible. The peculiar skylark-like motion of the wings is now almost continuously maintained, and the birds, instead of whirling round in a cluster, seem to prefer to lie head to wind. Against the loftiest white clouds their move-

ments may yet be clearly traced: up and up they go, appearing smaller each moment, till even the power of the glass is overcome, and the tiny specks vanish for the night.

As you drop your arms wearily you find that the dusk has fallen, the bats are out, and the evening mists are rising; but the swifts must now be nearly on a level with those remote

flecks of cloud, which, at an immense height, are yet snowy in the sunshine.

This charming incident of bird life can not be observed from all towns and villages with equal certainty. At Stroud I used to see it often, but in my present neighborhood swifts are not very plentiful, and only one or two have been seen to go up at nightfall.

CHARLES A. WITCHELL.

Gambling for Bibles.—On Tuesday, in accordance with the annual custom, there occurred at the ancient town of St. Ives, in the County of Huntingdon, a ceremony which, if not absolutely unique, is as curious a relic of ancient times as may be found in a march of many days. On first thought it seems that the sight of six little boys and six little girls dicing in a parish church to win a prize of a Bible must be unique, both in the past and in the present. It is certainly unique enough at present, but for the satisfaction of historical accuracy it must be said that, connected with the Church of St. Lawrence, at Reading, there existed at one time a dicing ceremony for the encouragement of good maidservants. But the rattle of the dice has so long ceased at Reading that St. Ives can claim to stand alone in the present. The queer old custom started in this way: As far back as the year 1673 a bequest of fifty pounds, invested in land, was made by an eccentric Dr. Robert Wild, of Oundle, Northamptonshire, for the purpose of distributing six Bibles yearly among twelve children. It was stipulated that six boys and six girls should cast dice for the Bibles during divine service every Whitsun Tuesday morning. When the custom was first carried out in 1693 the dice were rattled on the altar. This was done for many years; but about half a century ago the incongruity of the thing was too much for the reigning vicar, and during his time and ever since the throwing has been done on

an ordinary table placed in the centre aisle.

Briefly, this is how the ceremony is performed nowadays: At about nine o'clock in the morning the vicar or his curate appears with the church wardens in the centre aisle. Some ordinary little table is procured from a neighboring cottage; then in file six nice little boys and six nice little girls, who take up positions near the table. The signal is given, and three boys begin competing with three boys and then half the girls compete with the other half in like manner. Each competitor throws the dice three times, and the church wardens keep the counts. The unsuccessful six then go on trying until they win, and although one might become a very old "boy" or "girl" before that happened, fortune is never known to have frowned on any of the dicers for longer than five years. The successful six, who are presented, according to the price stipulated, with seven-shilling Bibles, strongly bound in leather, are expected to attend divine service in the evening, when the vicar, of course, improves the occasion. Near the church is situated a patch of land still known as "Bible Orchard." The Church of All Saints, in which the ceremony takes place, is an interesting structure and contains a great quantity of Norman work, the original building having been erected by the abbots of Ramsey, who also constructed the ancient bridge which still crosses the sluggish bosom of the Ouse.—*St. James's Budget.*

